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featuring the best
Scale AFV Modelling

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Red Alert
PRAGUE 1968

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Seasonal good wishes and a happy new year to all our readers from everyone at AFV Modeller

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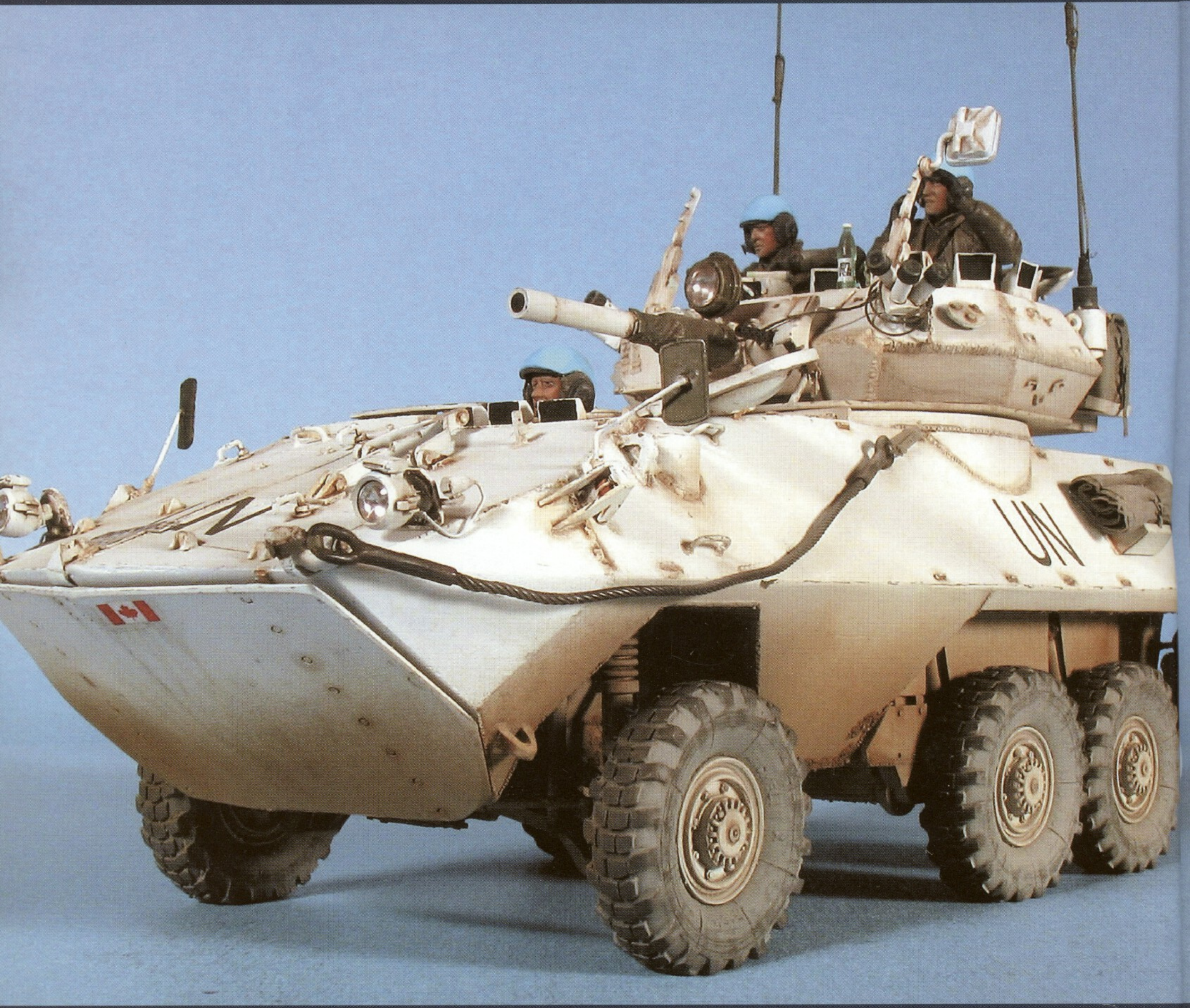


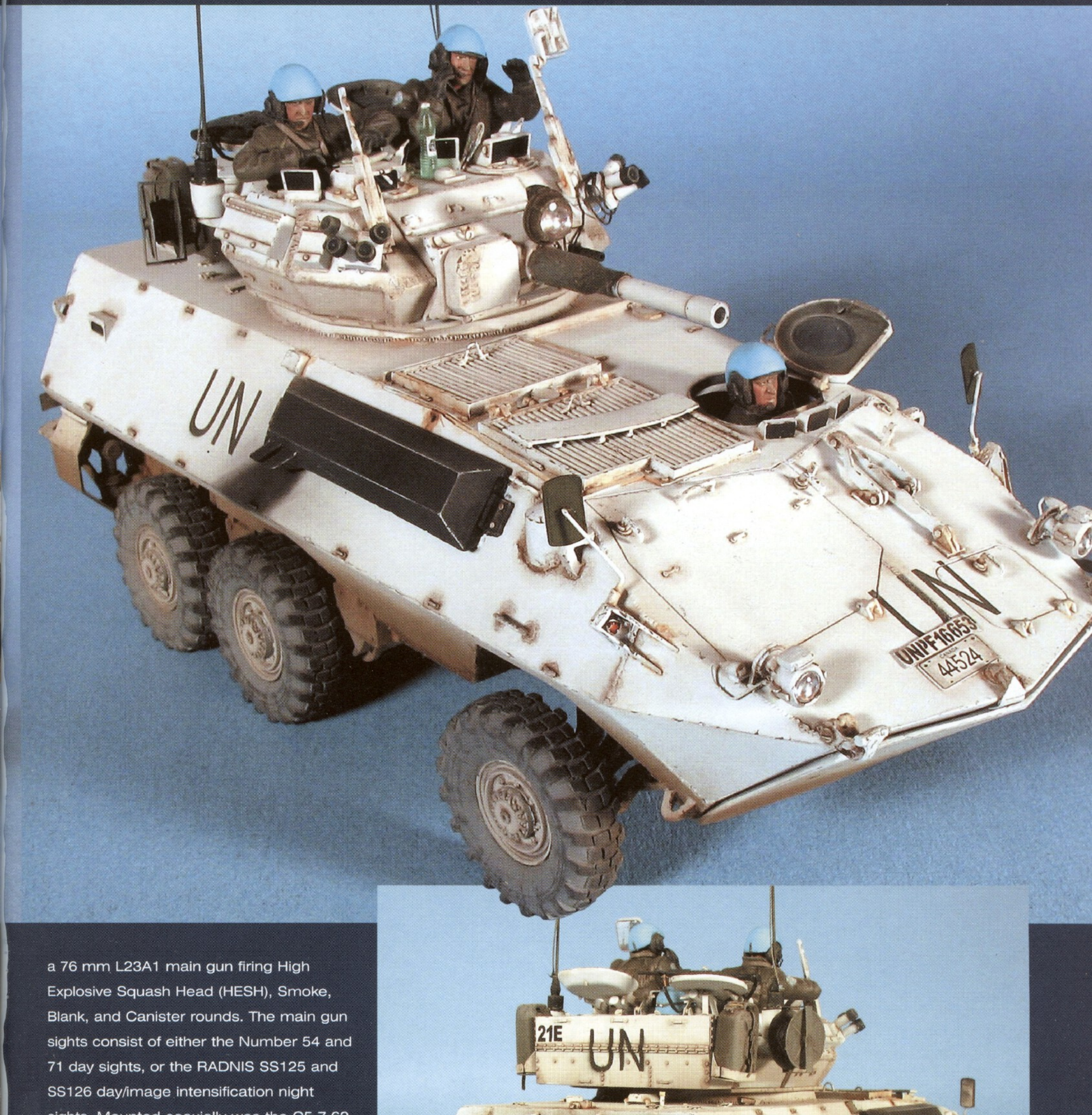
Canuck Cougar

Jason Bobrowich builds his UN Armoured Patrol Vehicle

In 1977 the Canadian Armed Forces selected the Swiss Mowag 6x6 Piranha as a base for the Armoured Vehicle General Purpose (AVGP) series of vehicles including the APC (Grizzly), the Recovery Vehicle (Husky), and the Fire Support Vehicle (Cougar).

The 195 Cougars purchased were delivered to Canadian Armoured Regiments starting in 1979 and ending in 1982. The Cougar was chosen to serve as direct fire support in combined arms operations, reconnaissance and control during peacekeeping and internal security operations, and as a tank trainer for armoured crews.

The Cougar combined the Mowag Piranha hull and the Alvis Scorpion turret. It mounts



a 76 mm L23A1 main gun firing High Explosive Squash Head (HESH), Smoke, Blank, and Canister rounds. The main gun sights consist of either the Number 54 and 71 day sights, or the RADNIS SS125 and SS126 day/image intensification night sights. Mounted coaxially was the C5 7.62 mm GPMG. The turret also mounts two No. 12 Mark 1 Multi Barrel Smoke Grenade Dischargers. The Cougar is powered by a Detroit Diesel 6V53T giving the vehicle a road speed of 100 kilometers per hour. The AVGP series was amphibious with minimal preparation and was propelled by a two-propeller marine drive system. The armour on the hull is about 10 mm thick and was designed to protect crews from small arms and shrapnel.

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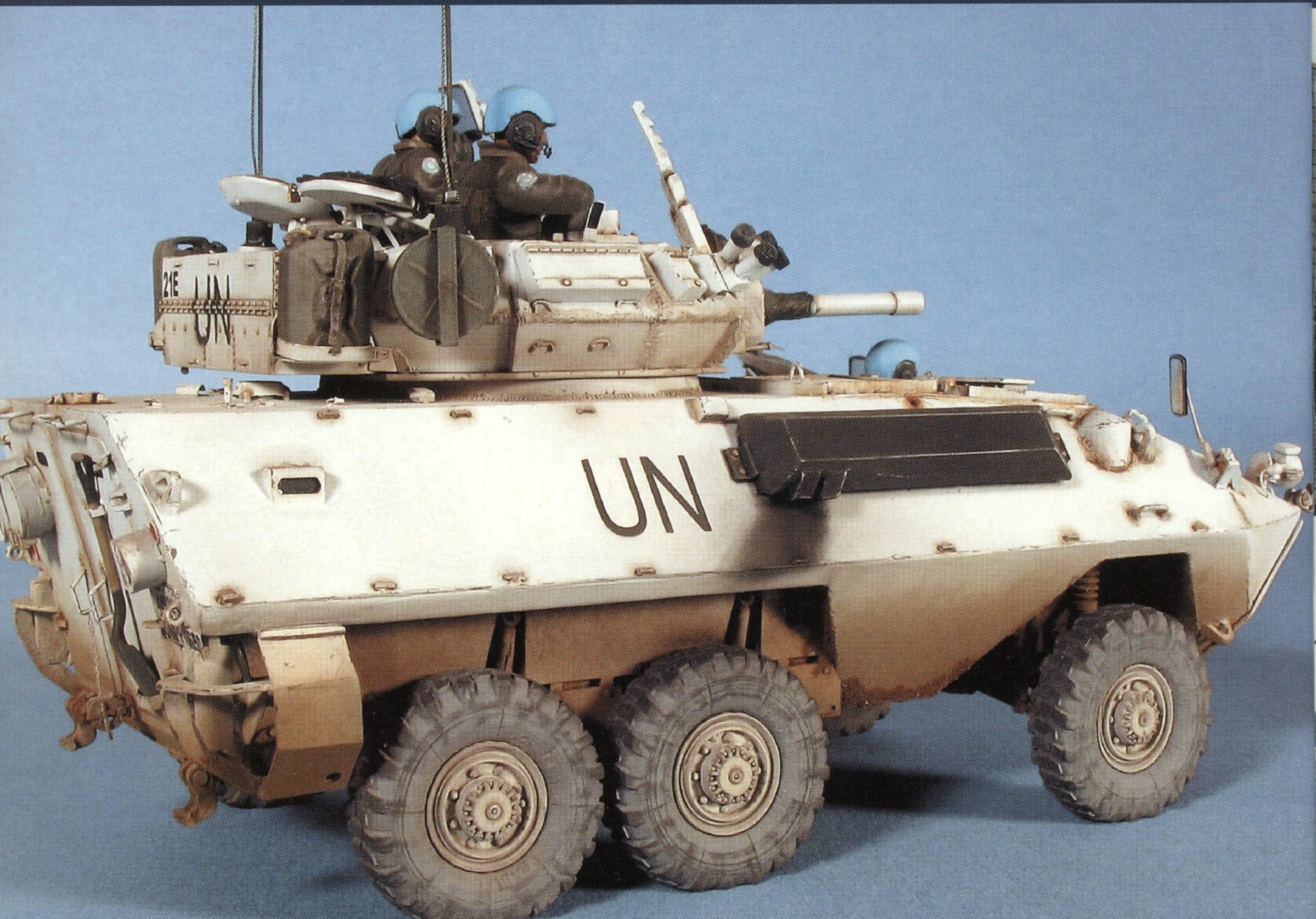
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Cougars were deployed as Internal Security Support to assist Law Enforcement forces during Operation Salon, the 1990 standoff at Oka, Quebec. Cougars also deployed with Operation Cordon to Somalia in 1993 with UNOSOM where nine AVGP's including at least three Cougars suffered damage from mine strikes. Due to the shape of the hull most of the blast was isolated to the suspension areas and no crews were seriously injured. From 1992-1995 Cougars were part of Operation Cavalier with UNPROFOR II in Bosnia. The white painted Cougars were used to conduct reconnaissance patrols, armed escort of humanitarian convoys, and as mobile checkpoints. The Cougars were repainted green, upgraded, and remained with NATO forces in Bosnia as part of IFOR during Operation Alliance, and Operation Palladium with SFOR. The Cougar has been replaced by the Coyote Direct Fire Support Vehicle in the Regular Force, and now only serves with Reserve Units.

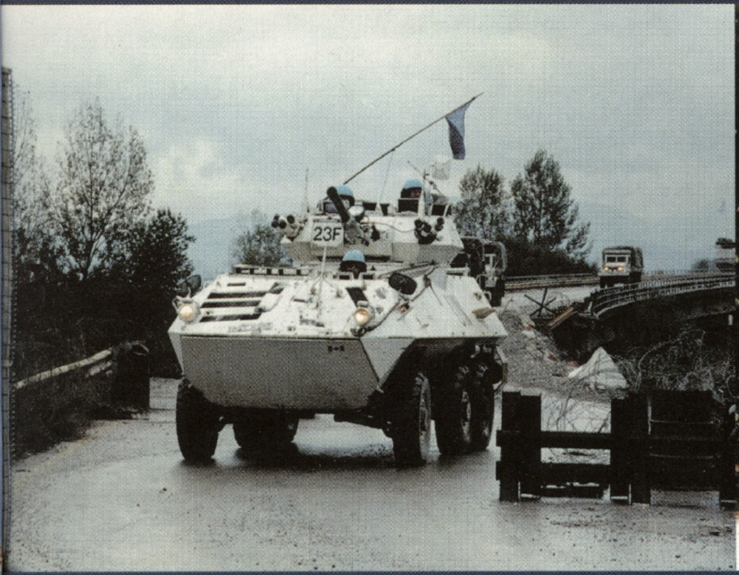
Modelling my Cougar

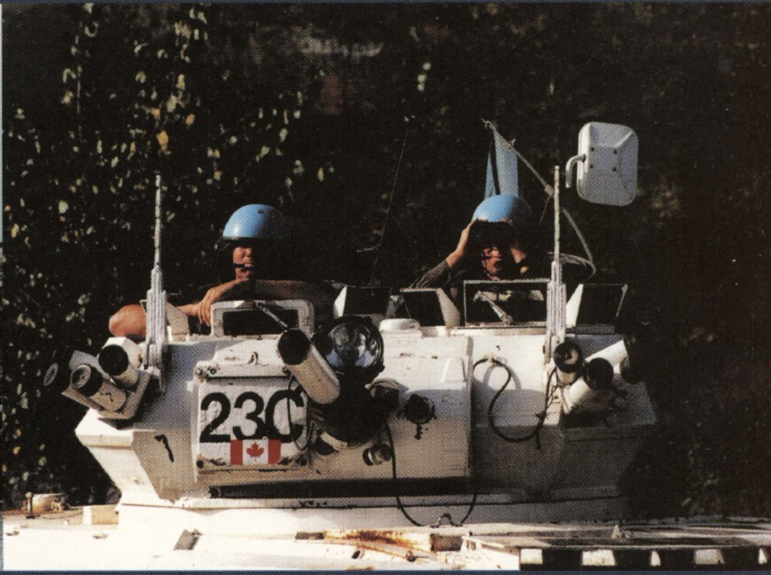
I served in Bosnia in 1994 as a Cougar Crew Commander. I found the Cougar a vehicle well suited to the mix of rural and urban terrain of Bosnia. It provided good mobility, speed, and firepower. The Cougar was able to travel easily at a variety of speeds on the main highways, small village roads, and winding mountain trails. The vehicles were in constant use on patrols and convoy escorts, or acting as temporary roadblocks and checkpoints. Patrols of 200 kilometers in a day were not uncommon. The vehicles took a beating and weathered quickly but amazingly kept running and ready. I have waited rather impatiently for the chance to model the Cougar I commanded in Bosnia during my 6-month tour. Armed with an album full of photos, the Hobby Fan Canadian 6x6 Cougar AVGP, a selection of aftermarket parts, and some scratch building I set off to start this project.

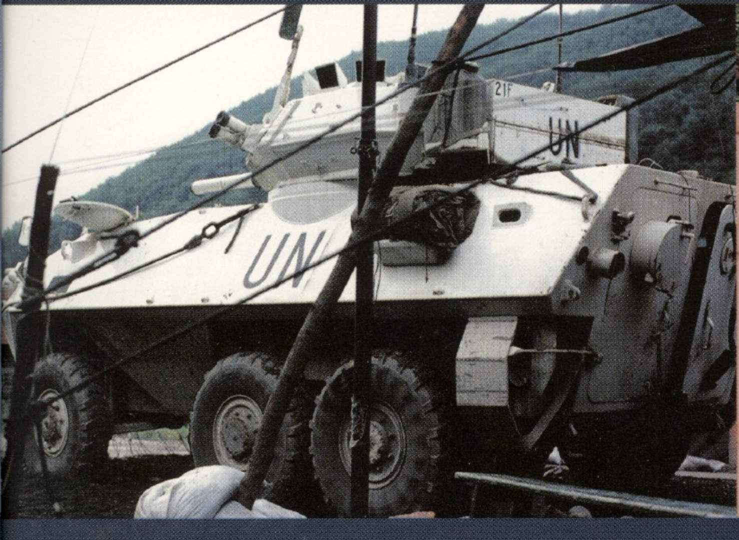
The Hobby Fan Kit

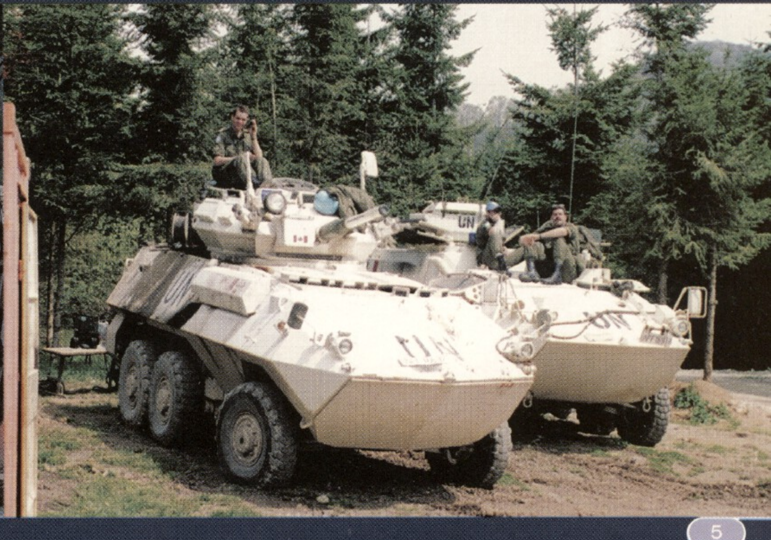
The Cougar kit consists of a mixture of resin, injected molded plastic, and a turned aluminum barrel. The resin is well cast and provides crisp details and limited flash allowing for fairly easy cleanup. There was slight warping of the rear hull piece and main gun depression stop but this was fixable. Also included is a small decal set consisting of a bridge classification and the unique Canadian Forces Registration license plates.

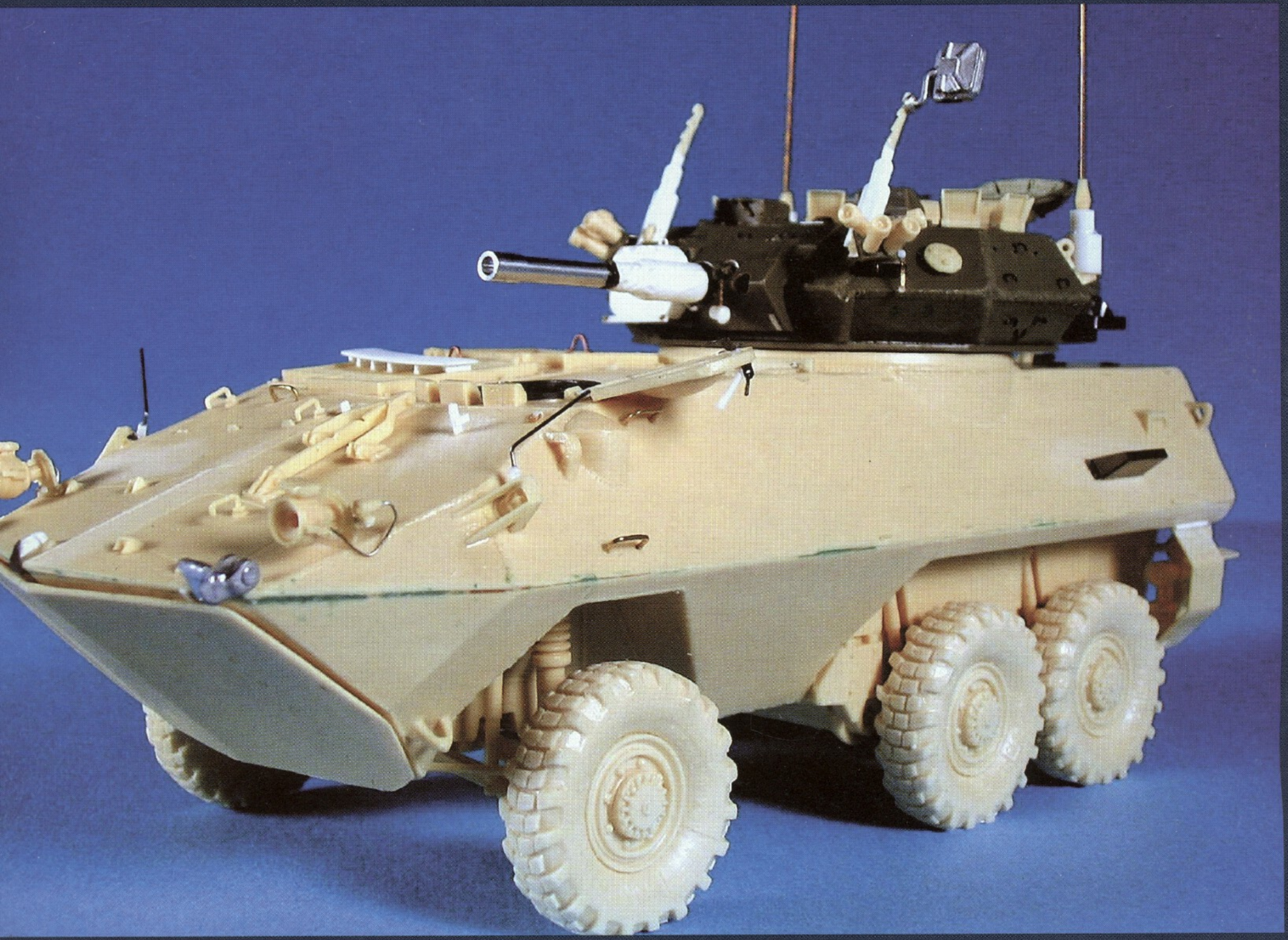
The turret and barrel are straight out of the AFV Club Scorpion kit. The tires supplied are the newer XML series used on upgraded vehicles. Also included is a resin molded newer style open cage turret basket molded with a cam net and bedrolls. This open bin replaced the older Scorpion bin in 1995. Neither the tires nor the new style bin were in use in Bosnia in 1994, and would not be used on my

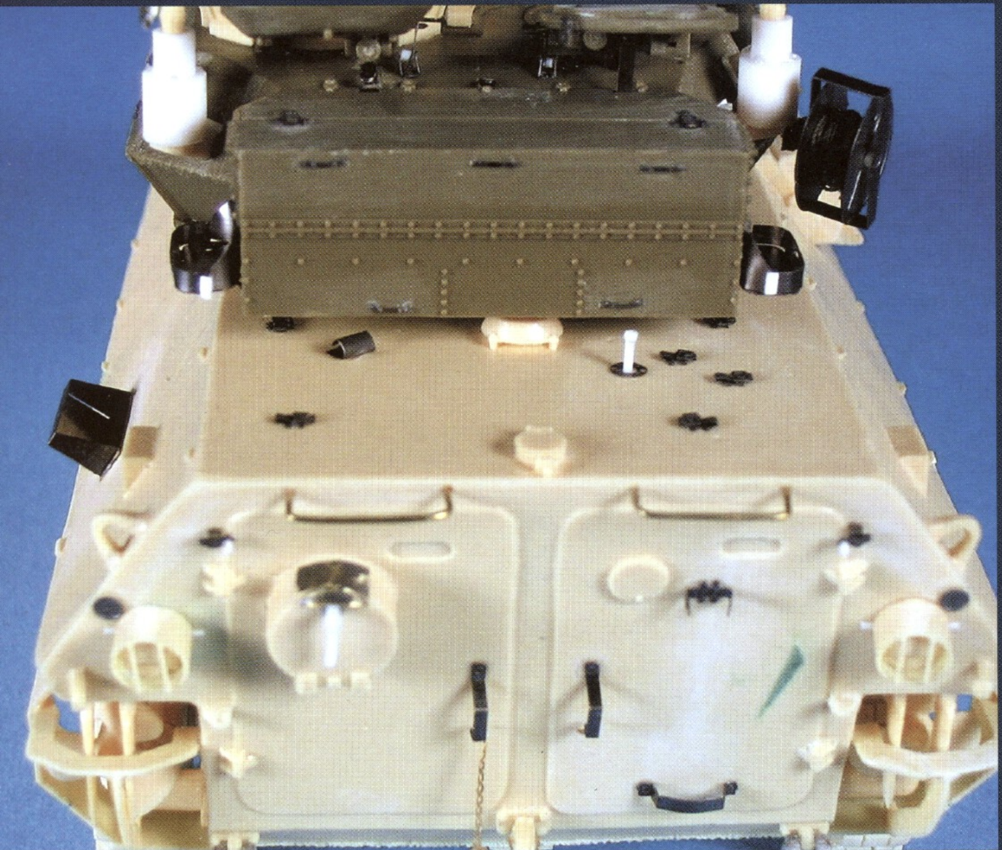












model. Turret details specific to Canadian vehicles such as the spotlight, the external communication connections, and the barrel dust cover were not included and would have to be added. The hatches, pioneer tools, trim vane, wire cutters, and antenna-mounting units would also need some extra attention. Overall this kit looked very good, and had a lot of detailing potential.

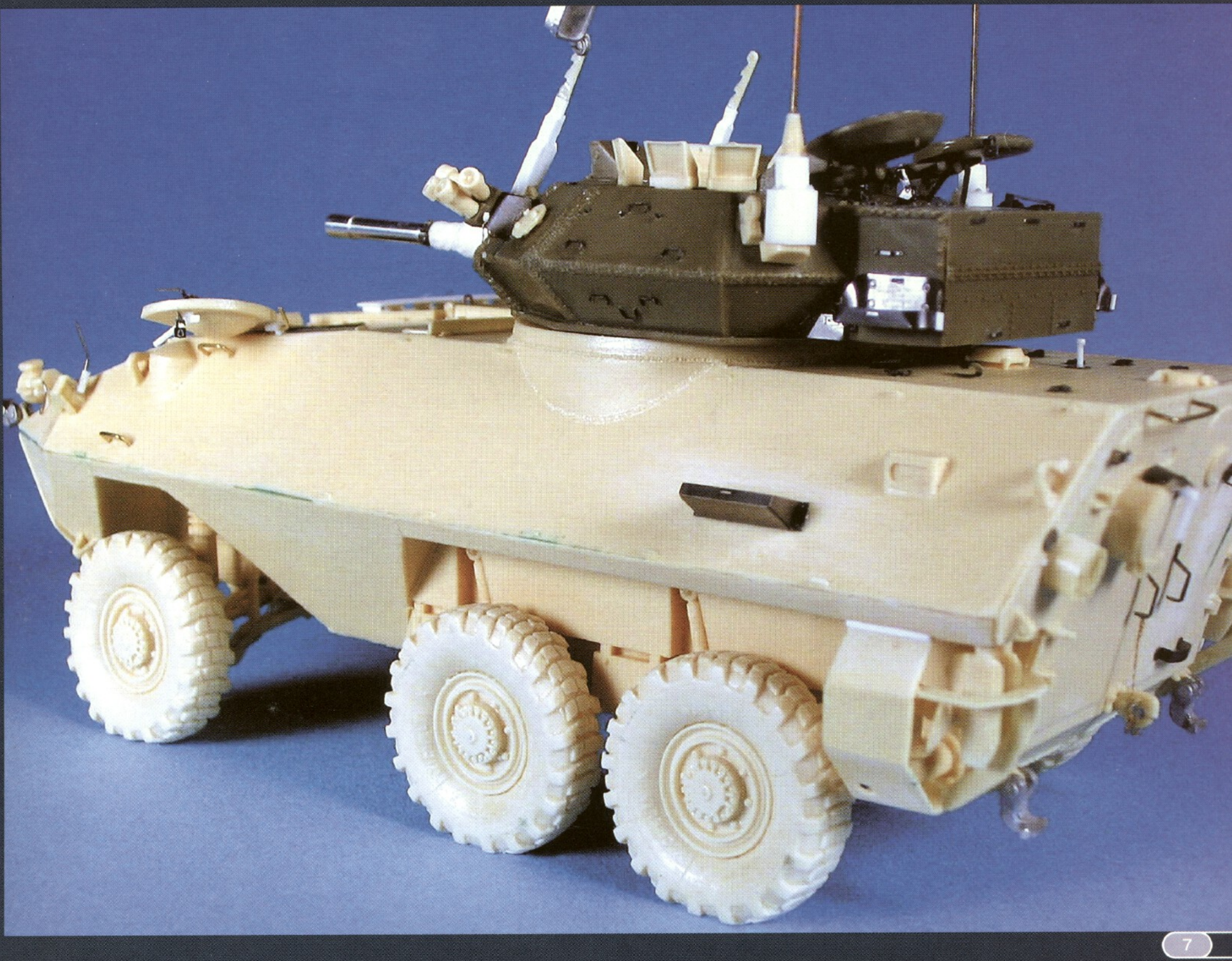
Construction

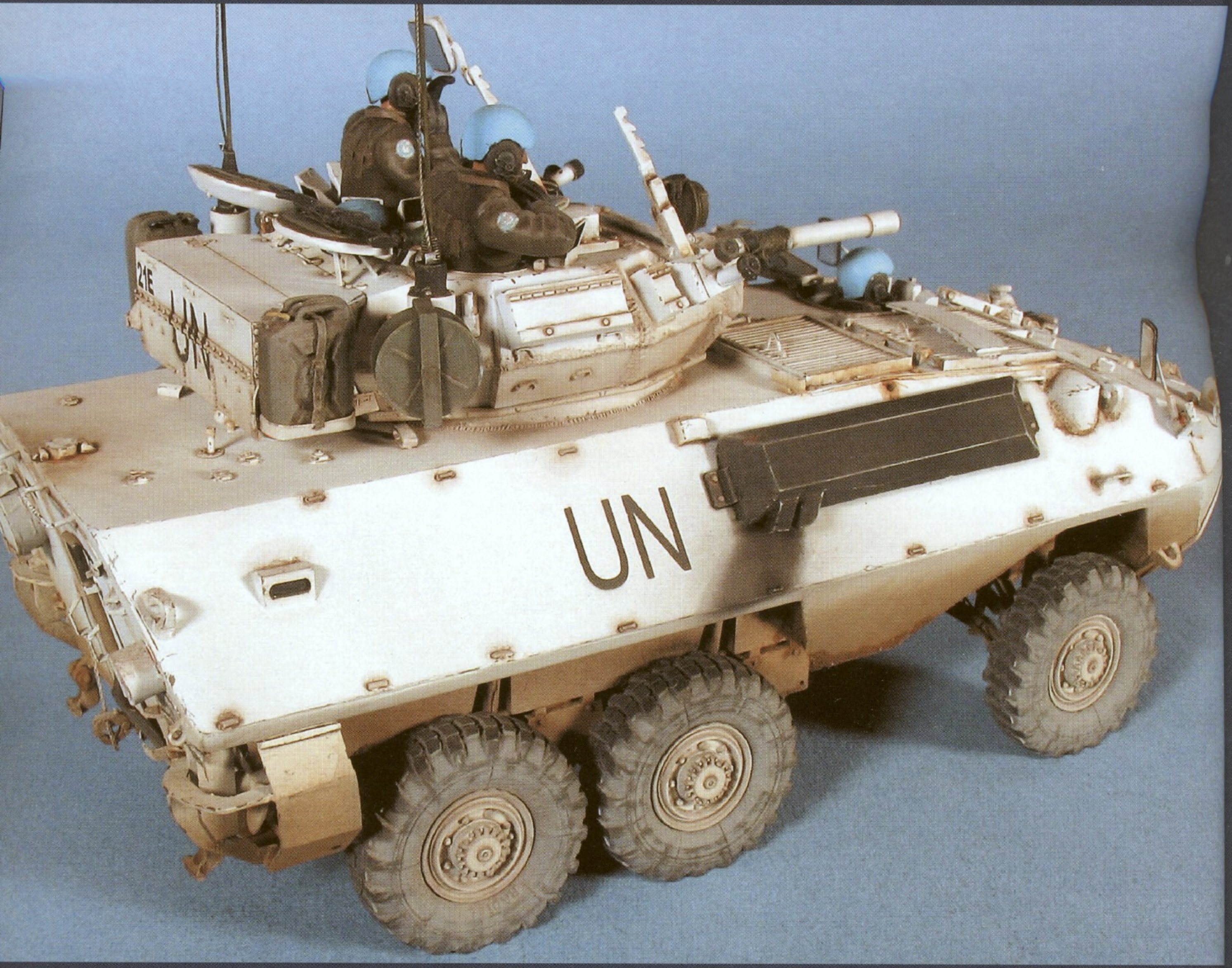
To start this project I began with the assembly of the main upper and lower hull pieces. The upper and lower hull is solidly cast and required the casting blocks on the parts removed and sanded down. The fit of the two parts was by no means perfect and a little adjustment and filler was needed to get a smooth seam along the hull. Small air bubble pockets were present along the front corners of the upper hull part and also required filling. There is a weld seam that appears on the along the top of the upper hull of the kit. The actual were added to the signal light brush guards. The headlights were detailed by drilling out the lenses to accept MV Products lenses, and wiring added for the blackout drive marker lights. The trim vane was thinned and mounted with details added to the mounting point to the hull using styrene strip and the Eduard LAV 25 set.

The hull was further detailed by replacing the kit grab handles with brass wire and adding white metal towing pintles from the MR Models Canadian Army M113A1/A2 update set. The marine drive system at the hull rear was spruced up by thinning both the rudders and propellers. The suspension went together quite easily and received detailing by replacing the drive shafts to the rear four wheels. The kit parts are slightly short, and will not properly line up. The barely visible brake lines to the front wheels were added using thin wire after drilling the connecting holes in both the hull and wheels areas. The kit wheels represent the newer style XML series tires. These tires were not used during the UNPROFOR mission on the Cougar and were replaced with Maple Leaf Models Early LAV/AVGP tire set. The Maple Leaf Models tires have excellent detail and required a small bit of clean up to the tread surfaces and the mounting holes to fit the kit parts. Once mounted the tire bottoms were sanded down to give a weighted appearance.

The turret construction was very straight forward compared to the hull. The injection molded turret parts went together very easily and are well detailed. The episcopes and smoke grenade dischargers are provided by Hobby Fan cast in resin and are very well done. They were detailed with the mounts from the Eduard Scorpion set and wire added for the electrical cables. The older style square rear turret bin was used on this model. The turret bin tie downs were replaced with photo-etched parts from the Eduard Scorpion set. Eduard photo-etch jerry can racks were added to the bin sides. Tie downs made from brass wire were constructed and fitted to the turret. The Commander's hatch padding was adding using Milliput putty, and molding sink marks were filled on the Gunner's hatch padding. Both hatches received extra detailing on the hatch straps and locking mechanisms with the use of the Eduard Scorpion set.

The barrel is turned aluminum and looks very good. A dust cover was made from tissue and detailed with Eduard photo-etch straps. The mantlet required a little extra work. A counterweight made of sandwiched styrene was added to the right side and recessed bolt holes drilled. Aber 1-millimeter photo-etch numbers and letters were added to the counterweight. The lifting ring from the Eduard Scorpion set was added behind the counterweight.

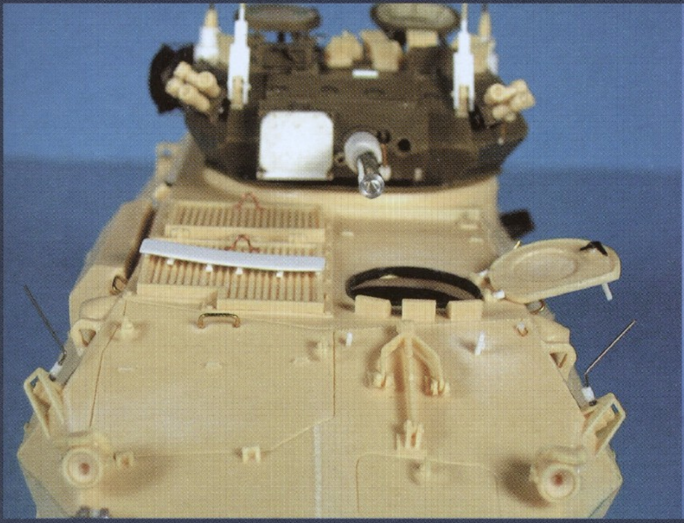


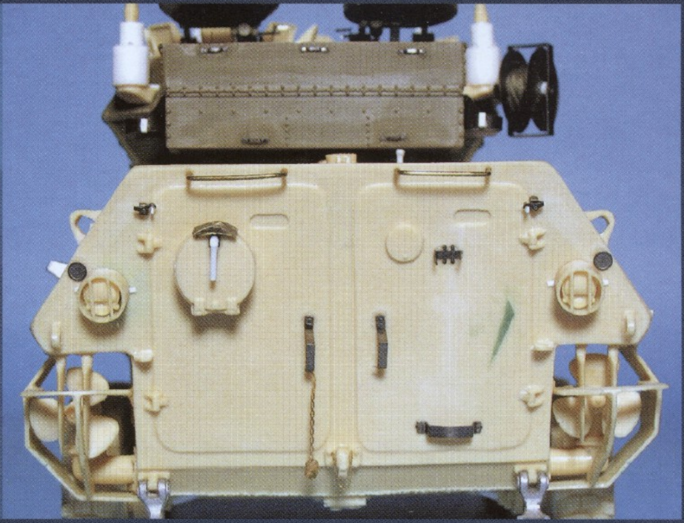


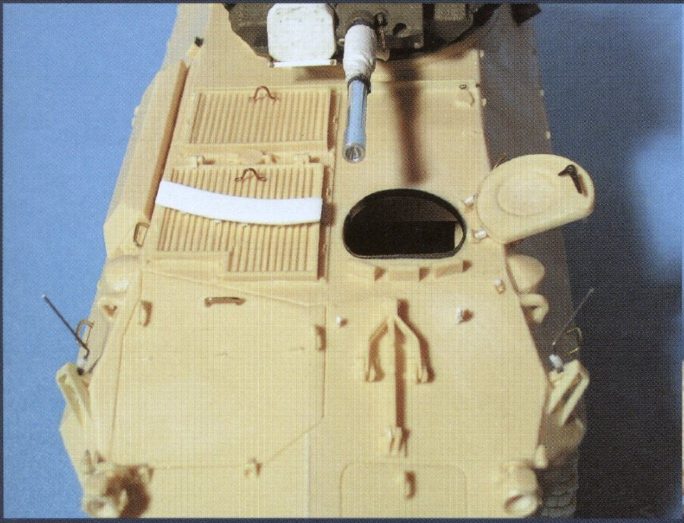
Cougar hulls have a smoother seam and this was sanded down. The weld seam around the turret ring is correct and was not touched. The only other prominent weld seams are on the horizontally and vertically angled armour along the hull front.

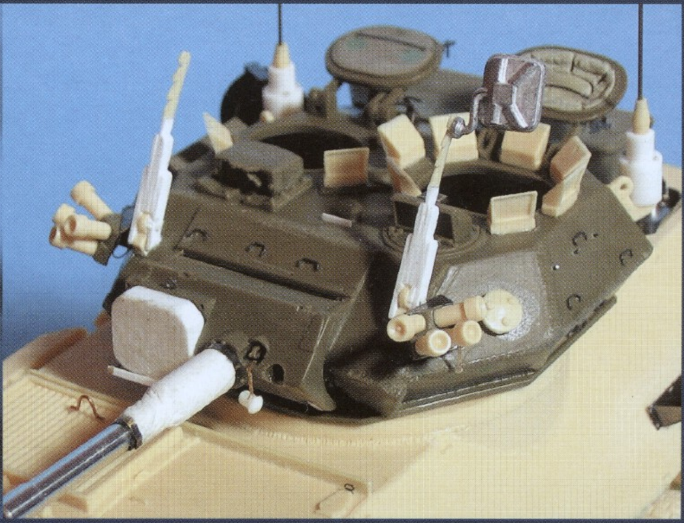
The pioneer tools on the upper rear deck are well represented but were removed. Replacement straps and brackets were added using Aber straps and plastic rod with the help of photo references. Cougar crews store these tools inside the vehicle as the brackets were not durable and the tools could fall off or be stolen. I removed the shovel and bracket from the rear hull piece. I replaced it with one from Collector's Brass and the bracket using Eduard photo-etch parts. At this time I also removed the cast on reflectors and replaced them with brass versions. The tank telephone handle is slightly different than the standard Leopard version. A new handle was using styrene rod and brass. The rear hull part was a tricky piece to fit. A lot of sanding and trial fitting was needed to get the upper and lower hulls to mate smoothly with the rear piece. On the actual Cougar the joints are smooth and blend into each other. Rear door details included photo-etch latches, handles, and tool shovel rack from the Eduard LAV 25 set. A common feature seen on the Cougars was a length of chain so the rear doors could be padlocked when the vehicle was parked. This was added using Aber chain and an Accurate Armour padlock from their Warrior update set. A jerry can rack from the Eduard LAV 25 set was added to the hull left side. Some Cougars had the racks mounted on both sides so check your references. The engine exhaust and bilge pump outlet were drilled out on the right hull side.

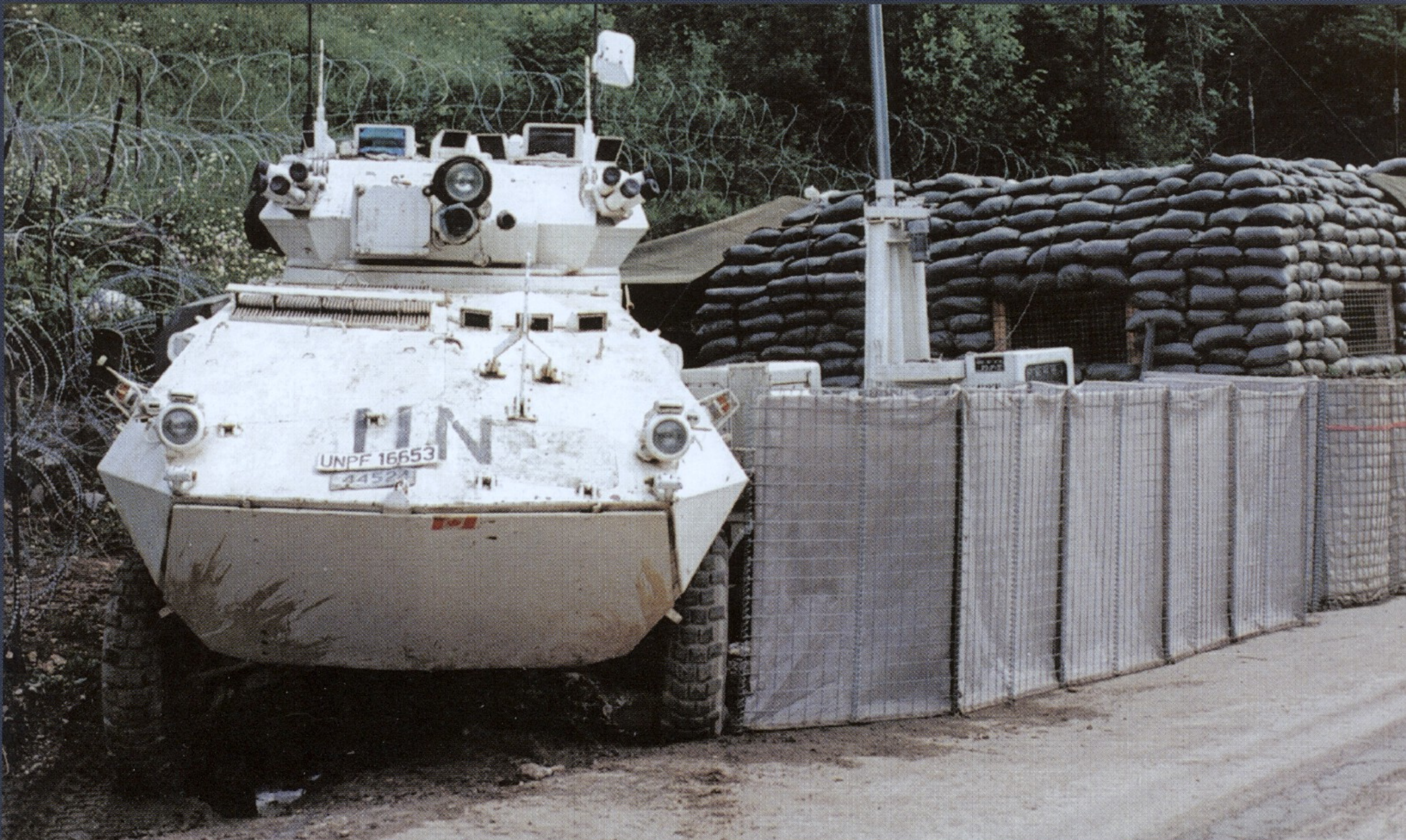
Moving to the hull front I noticed that the interior of the driver's hatch opening was very visibly over thick. The excess resin on the interior was removed and a hatch lip was made from thin brass strip. The hatch was detailed with new handles, locks, and supports. In front of the Driver's episcopes are mounting points for the windscreen and the wiper power cable receptacle. These were added using styrene strip and a small bit of Aber chain. The kit main gun depression stop on the forward most engine grill was replaced by one scratch built. The engine grills also received brass wire lifting hooks. A small latch was also added to the crew heater exhaust cover behind the Driver's hatch. Mirror mounts







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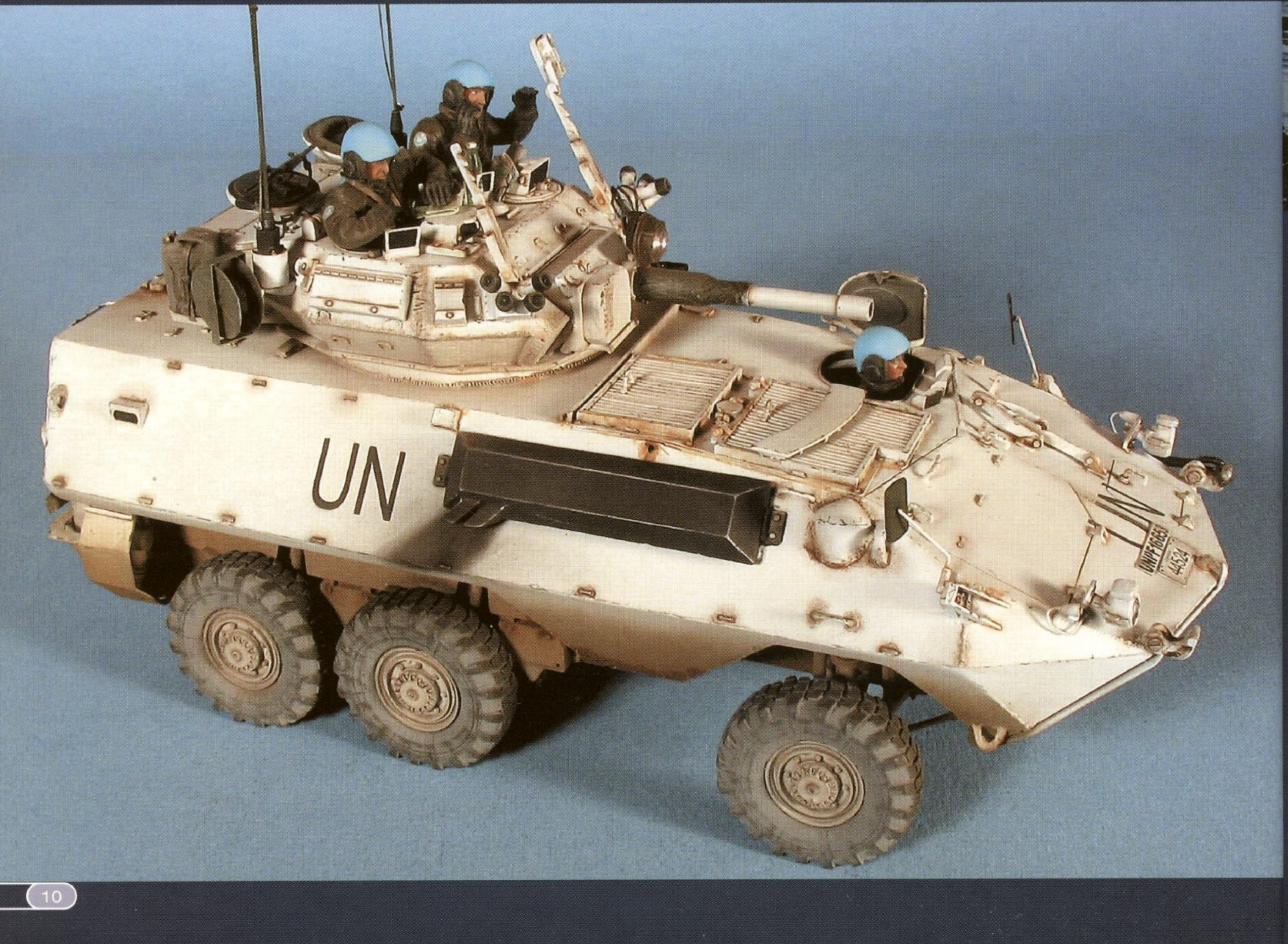
The antenna-mounting units and the wire cutters required rebuilding. The kit mounts were cut up leaving the top springs and the turret mount. The remainder was built using styrene rod and Grant Line bolts added. The antennas were added using steel wire. Behind the right antenna-mounting unit I added the external communications connection using styrene strip and brass wire. Added onto the right antenna-mounting unit was the wire reel mount from the Eduard Scorpion photo-etch set. The only part of the kit wire cutters that was retained was the top third. The remainder was scratch built using styrene strips. A white metal mirror from the MR Models Canadian Army M113A1/A2 update set was added to the left wire cutter. These mirrors were taken retired Canadian 5/4-ton trucks and aided the Crew Commander in seeing behind the vehicle during convoy escorts and patrols. Depending on references they could be mounted on one or both mirrors. Leopard 1 style mirrors could also be seen mounted on the wire cutters.

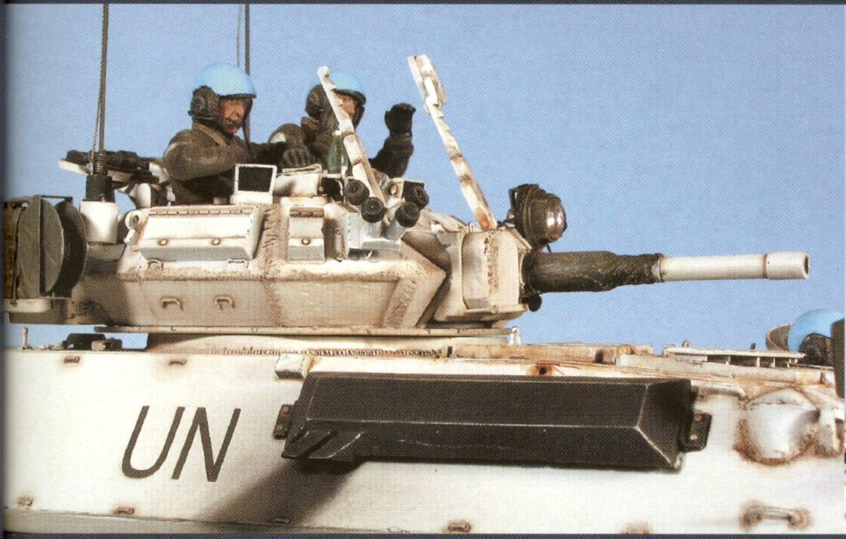
Painting and a little Weathering

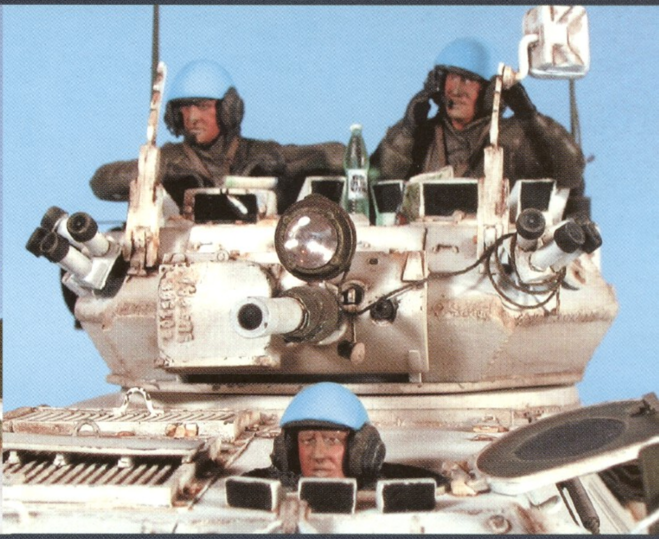
To start the painting the hull, turret, and wheels were first primed using Tamiya Neutral Grey. After the primer had dried for about 48 hours scratches in the resin were touched up with MR Surfacer and then sanded smooth. The sanded areas received a touch up coat of Neutral Grey and set aside to dry for 24 hours. Next several light coats of Testors Acrylic Flat White were applied in order to achieve an evenly covered surface. Once the white was allowed to dry for 24 hours thinned Tamiya Buff was applied to the lower hull and wheels to achieve a dust coating on the lower surfaces of the vehicle.

Markings

The Cougars in Bosnia received a variety of markings. The size, location, and number of UN markings and call signs depended on availability of stencils at the time. For the UN markings I used the Eduard United Nations mask. The mask was trimmed to fit and was secured in place with masking tape. The UN lettering was then air brushed using Tamiya NATO Black. The mask was removed leaving very realistic markings. My vehicle call sign "21E" was added to the turret rear using the Archer Canadian KFOR Markings fine transfer set. The Canadian flags on the trim vane and left rear hull were added using the flags from the Archer Modern Canadian Licence Plate fine transfer set. Using photos of "my" Cougar in Bosnia a United Nations Protection Force vehicle registration plate was constructed using the Archer UNPROFOR Markings fine transfer set. The plate and numbers were transferred on to thin lead foil to give a thin bendable appearance. The Canadian Forces Registration licence Plate was made with the Archer KFOR Markings fine transfer set. The plate and numbers were transferred to thin plastic. Duplicate plates were made for the hull rear.







Detail painting and more weathering

When I was satisfied that the initial painting and markings was ready for more weathering I began to apply a variety of oil paint washes to the wheel hubs, hull, and turret with Windsor & Newton Raw Umber. Darker washes were applied around the fuel filler cap area, and engine grills. I then followed up with concentrated washes of Testors Flat Brown to simulate surface rust areas. After the washes were allowed to dry for 24 hours I started on the detail painting. I used Tamiya NATO Black to paint the tires, exhaust, smoke grenade discharger covers, episcopes, sights, and antenna mounts. A thinned wash of Raw Umber was applied to highlight details. These details were then dry brushed with Tamiya Neutral Grey. The barrel cover, antennas, and the hatch interiors were painted with Vallejo US Dark Green. A wash of Raw Umber was used, and once the wash had dried the details were dry brushed with Tamiya Buff. The final detail painting was done with Tamiya NATO Black on the turret and hull rubber hatch rings, and the driver's hatch head pad.

Final weathering was accomplished using a combination of fine filtered soil, pastels, and paint pigments. A diluted white glue solution was applied by brush to areas of the lower hull and fine soil sprinkled onto the glue solution. Once the glue and soil were dry pastels and paint pigments were blended onto the wheels, hull, and turret surfaces resulting in a well used looking vehicle. Paint chips were added using Vallejo US Dark Green and blended with pastels.

Final Details

Starting at the front end of the hull I added MV Products lenses for the headlights. A tow cable was constructed using the Karaya Sherman Tow Cable set. The cables were cut to the appropriate length and the eyelets added to each end. After the cable was painted with Tamiya NATO Black and weathered with a Raw Umber wash it was mounted using Eduard photo-etch straps. The hull-mounted mirrors were added using the mirrors included in the Eduard LAV 25 photo-etch set. Silver reflective foil was added to the front of the hull and turret mirrors.

The Alvis spotlight added to the top of the barrel came from the Tamiya Pink Panther SAS Land Rover. It was detailed with a MV Products lens, a scratch built photo-etched mount, and fine nylon thread cabling. The cable was run from the spotlight to the external connection on the left smoke grenade discharger. To the left of the main gun I added the coaxial mounted GPMG barrel using the outstanding Karaya perforated 7.62 mm barrel. The barrel needed only a light coat of black pastel to dull its finish. On the left side of the vehicle I added a tarp to the jerry can rack. The tarp was constructed using tissue paper and an Eduard photo-etch strap added to secure it to the rack. The tarp was painted using Tamiya Olive Drab and weathered with Raw Umber and pastels. To the turret jerry can racks I added the superbly cast Maple Leaf Models Modern Plastic Fuel Cans. These jerry cans have the look of the real thing with proper lettering, caps, and

even the bulged appearance of a real full can. The jerry cans were painted with lightened Vallejo US Dark Green. They too were weathered with a Raw Umber wash and dry brushed with Tamiya Buff. To denote Diesel fuel cans the cap retention strap was painted with Tamiya Yellow. The jerry cans were mounted and secured with Eduard photo-etch straps.

Moving to the turret top I added antenna tie downs to each antenna using olive drab nylon thread. On the bottom of both tie down I added the small metal hook using lead foil. The antenna were left straight up and not tied down. It was commonplace to have the antennas straight up when stopped for an extended period of time to help increase radio reception. A small UN flag from the Accurate Armour Challenger 2 MBT Decal set was mounted on thin foil and secured to the left antenna. I added water bottles from Accurate Armour Commercial Bottled Water set were added to the turret along with some homemade maps, a Tamiya US style Kevlar helmet, and a Canadian C-8 carbine rifle modified from the Dragon Delta Force, Somalia 1993 figure set. The gunner's sight received an overcoat of Tamiya Clear Blue as a final touch.

Adding the Cougar Crew

The crew figures were made using the Academy IDF Tank Crew set and modified to represent the Canadian style flak jackets worn during the UN mission. Both styrene and lead foil were used to build up the pockets and straps. The heads were created using Warriors Scale Models Universal Head set #4, CVC helmets from Dragon's US Tank Crew set, and Royal Model photo-etch US Microphones. I added scratch built wire helmet drop cords, and intercom/radio switches to each of the figures. The figure's heads were painted with artist oils, and the torsos and helmets with both enamels and acrylics. As a final touch small Canadian flag decals and hand painted UN patches were added to the left and right upper arms respectively of each figure.

Conclusion

With the project complete I was satisfied that I had built an accurate representation of the Cougar I commanded in Bosnia. The use of an excellent multi media kit, lots of high quality after market parts, and some scratch building made it fairly easy to bring this kit to life. Moreover, I had fun digging up memories of my experiences and vehicle details on this project.

I look forward to building the upgraded version of the Cougar someday, but before that will be the other Canadian armoured vehicle I commanded...the Leopard C1.

Photos

The photos were taken during my UN mission in Bosnia near the Visoko and Kiseljak areas West of Sarajevo from May to October 1994. The Cougars, including the one I commanded, are shown conducting patrols, convoy escorts, and checkpoints. Note the variety of marking differences, weathering, and vehicle modifications.

References

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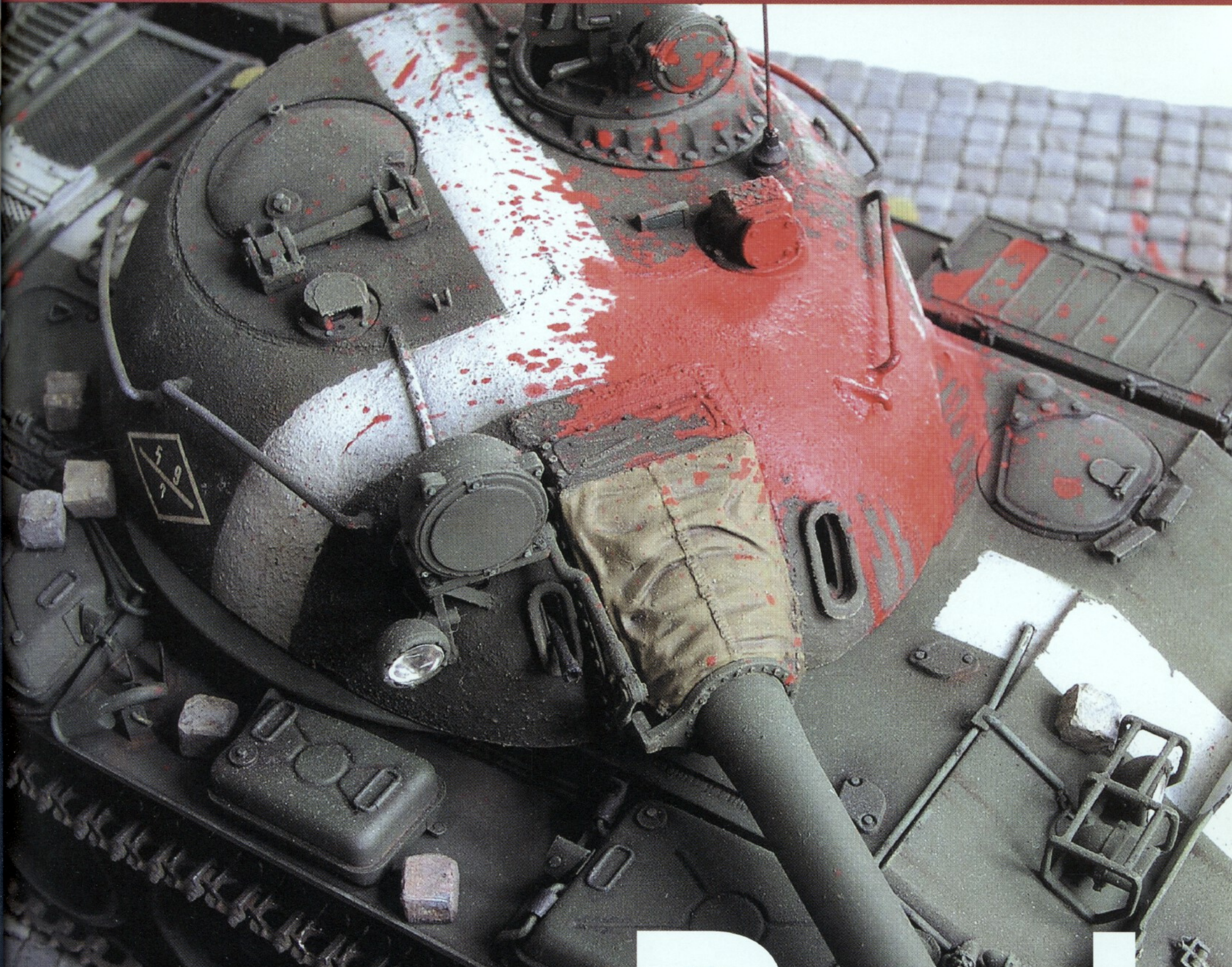
2. The Blue Helmets Under Fire by Samuel Katz and Yves Debay, Concord Publications Company

3. The Royal Canadian Armoured Corps, An Illustrated History by John Marteinson and Michael R. McNorgan, Robin Brass Studio Inc.

Ulf Andersson's



Red Alert

T55 m58 Prague 1968

Red Alert

The T-55, a legend for everyone interested in armour and modern history, finally got it's deserved treatment when Tamiya released their gorgeous kit in 2003. The T-55 was widely used throughout the Warsaw pact countries, and in most conflicts around the world involving Soviet interests.

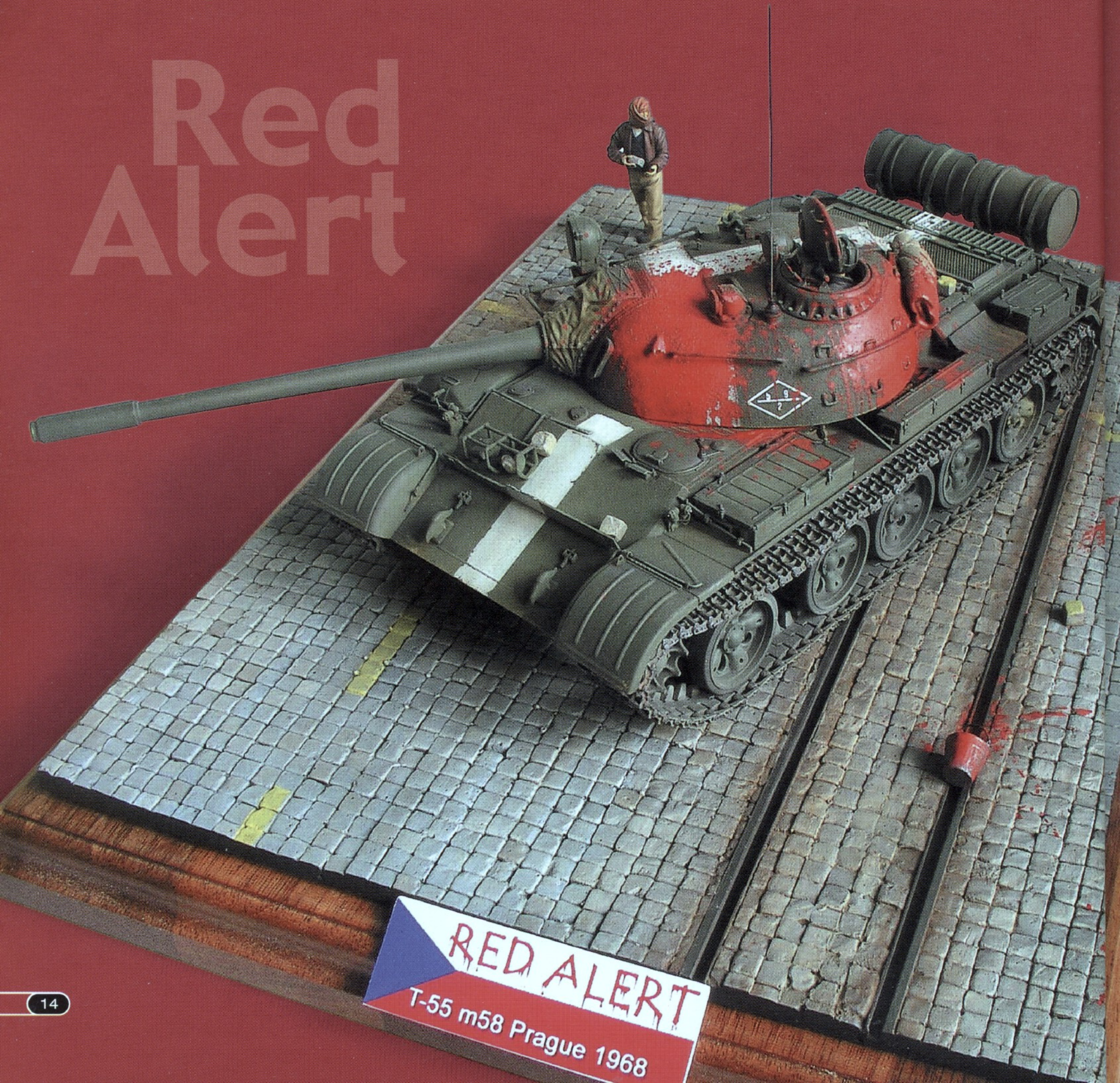
The precursor of the T-55 was T-54 and they are actually quite difficult to tell apart on faded black and white photographs. Apart from internal modifications, like engine and ammo storage, the easiest way is to look out for the mushroom vent dome on the turret roof and the loaders DShK anti-aircraft gun. These are not present on the early m58 T-55. The history books are packed with information from the Cold War with text referring to the T-55 when the pictures clearly show a T-54B - evidence of the T-55 as the predecessor of the military power of the former Warsaw pact.

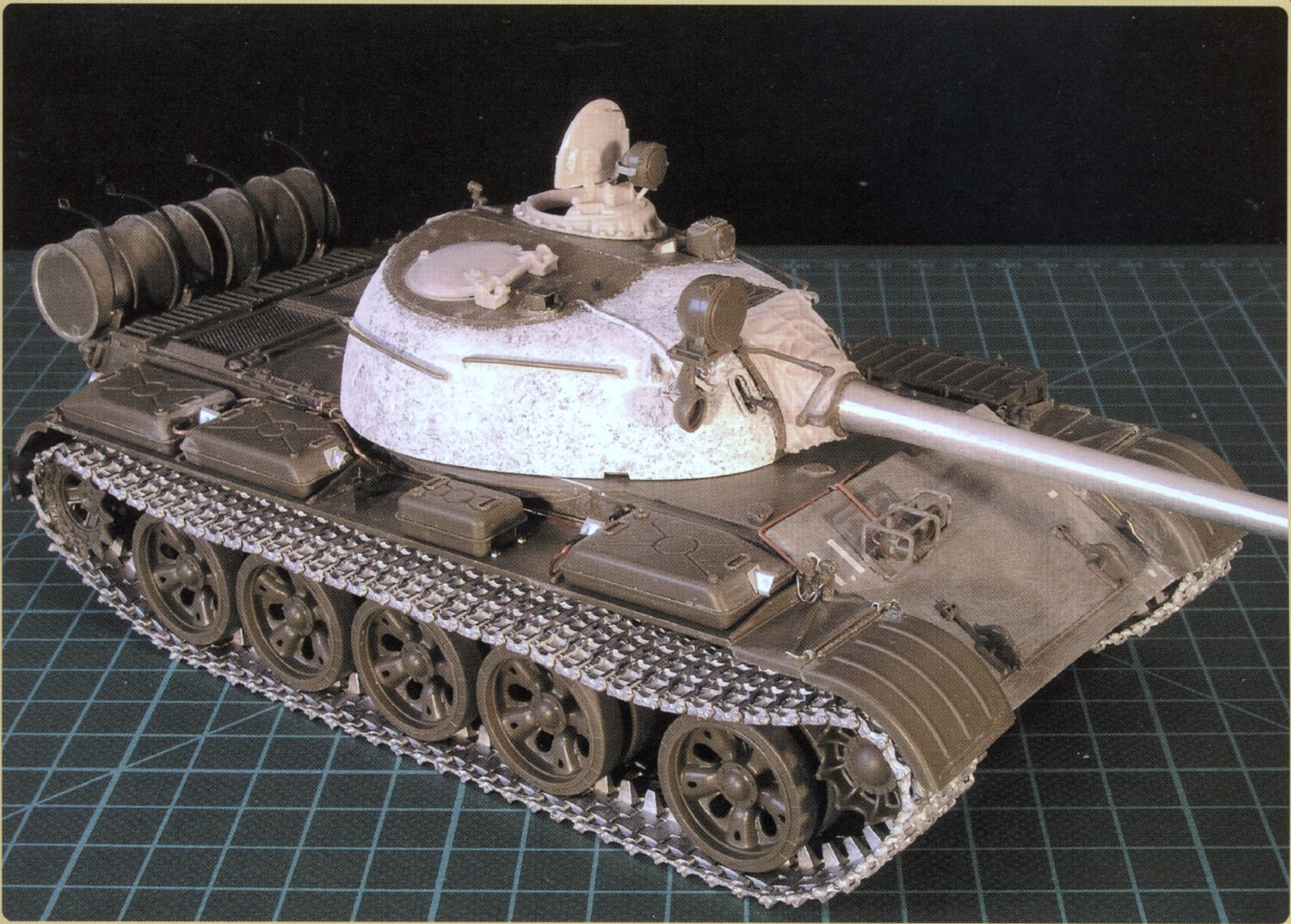
BUILDING

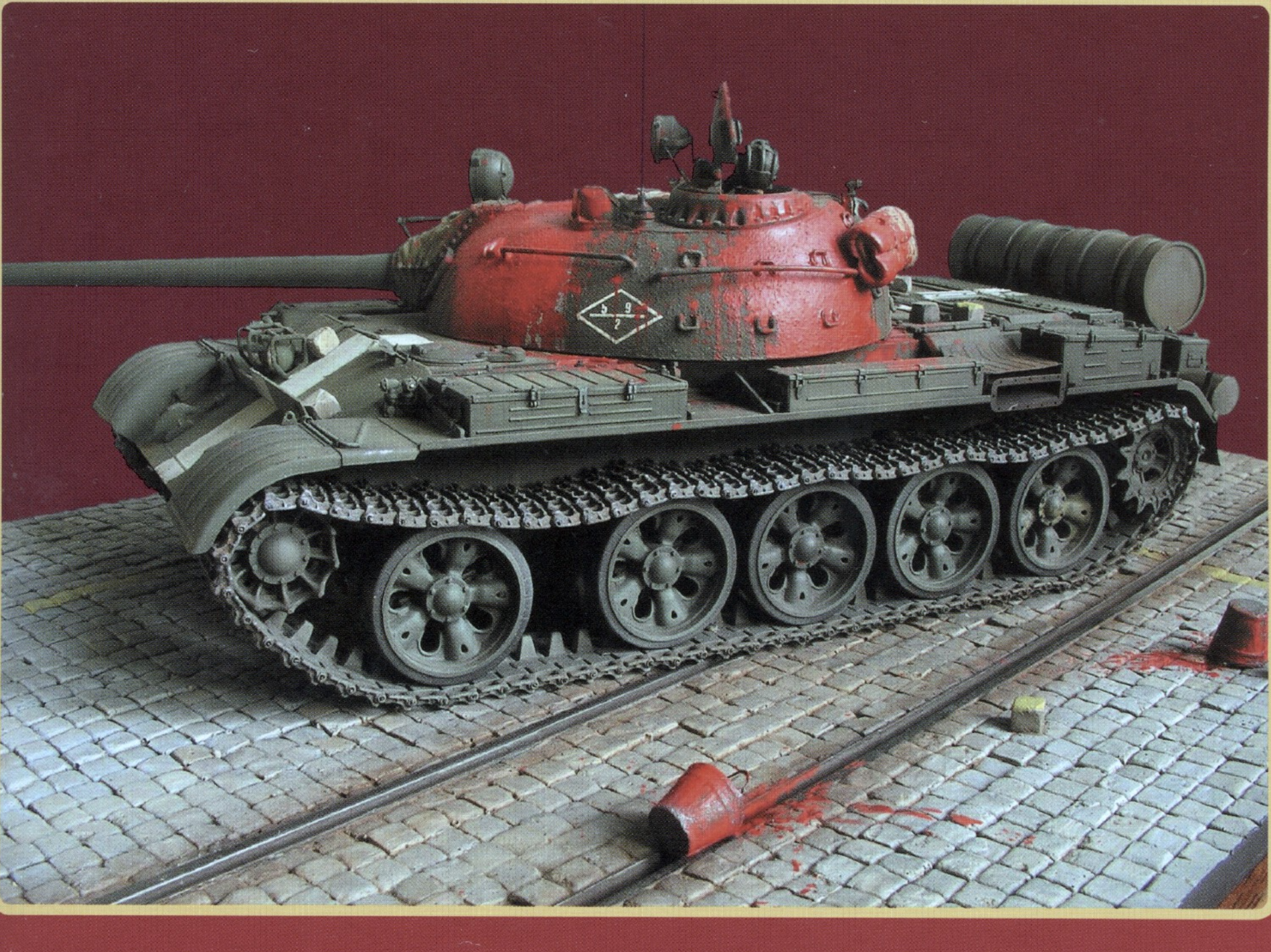
When I decided to build the T-55 I favoured the early m58. It's more stripped of extra equippement and protection and therefore, in my opinion, more attractive. The OOTB Tamiya model is a T-55A and it isn't difficult to backdate it at all. More attention has actually to be paid to detail left out, detail necessary on both versions.

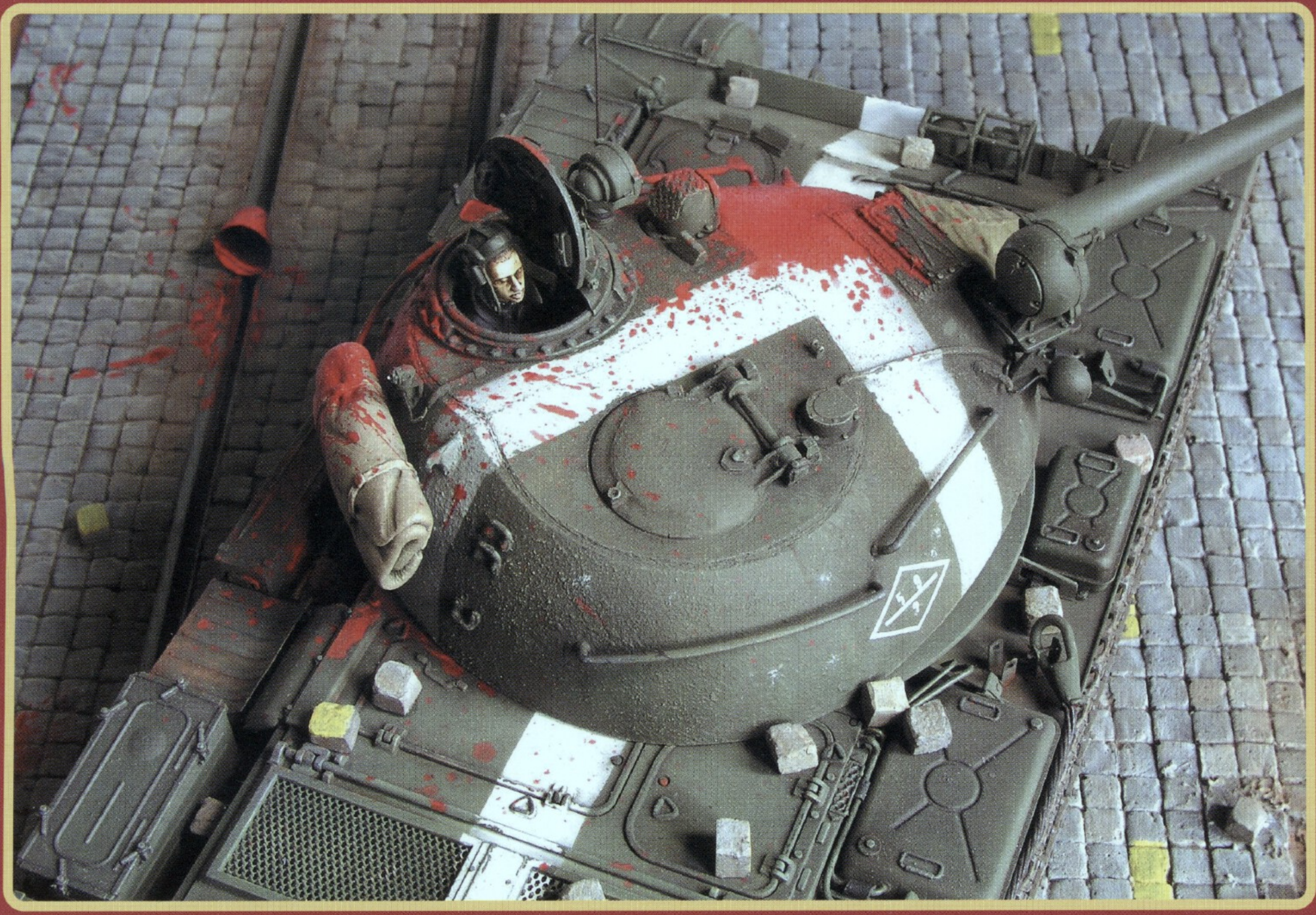
Modifications were to add only one lifting hook on the turret rear, remove the brackets on the glacis and replace the loaders protected hatch with a hatch flush with the turret roof using the correct hatch available from the BLAST MODELS update set. I also replaced the commander's hatch with the BLAST version, mainly because it's superior interior detail. The same goes for the mantlet shroud, the BLAST resin part is much crisper.

From the Eduard PE set I used all the mounting clips for securing toolboxes, the









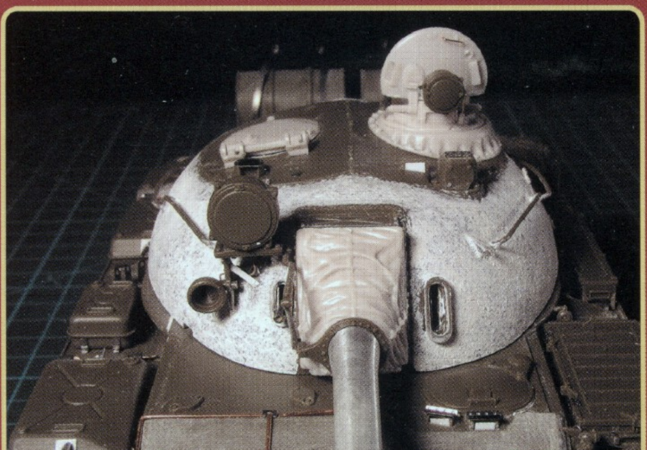
rear fuel drums, the commanders searchlight bracket, replacing the engine mesh and adding the exhaust outlet cover. One thing I really missed in this set is more detailed brackets for securing the fuel tanks on the fenders. They are very basic on the supplied kit parts. I cut them away and made new ones from printers aluminium.

Further additional detailing involved the intricate plumbing from the external fuel tanks to the engine and between the tanks themselves. I used copper wire for fuel lines and sleeving from tiny electrical wiring as rubber hoses. If I had to do only one change on the OOTB model then this certainly should be it. It makes a big difference to the final impression.

I added conduits for the electrical wiring leading to the headlights and positioning lights found on all four corners and on the turret rear. The last touch was to add wires coming out of the ends and going into each lamp, including the main headlight on the turret.

When the work involves detailing like this, lead wire is very easy to work with, but beware: it's not very strong and should be handled with care.

The wire cage sitting on the right hand side of the glacis is rather thick. Photos show much more delicate material. I sanded it down to a more realistic thickness, but the best looking result comes from a totally new, soldered one made from brass wire.



I hollowed out the two smaller lights with my Dremel and prepared them for MV lenses once the painting was done.
As usual, I relied on the Fruilmodel tracks. The weight adds feel and they run beautifully on top of the road wheels. I also added the Eduard turned aluminium barrel.

The smoke extractor slot on the bottom of the right hand side of the turret is easily added with an Exacto knife. and there you are - without too much hassle here we have a T-55 m58.

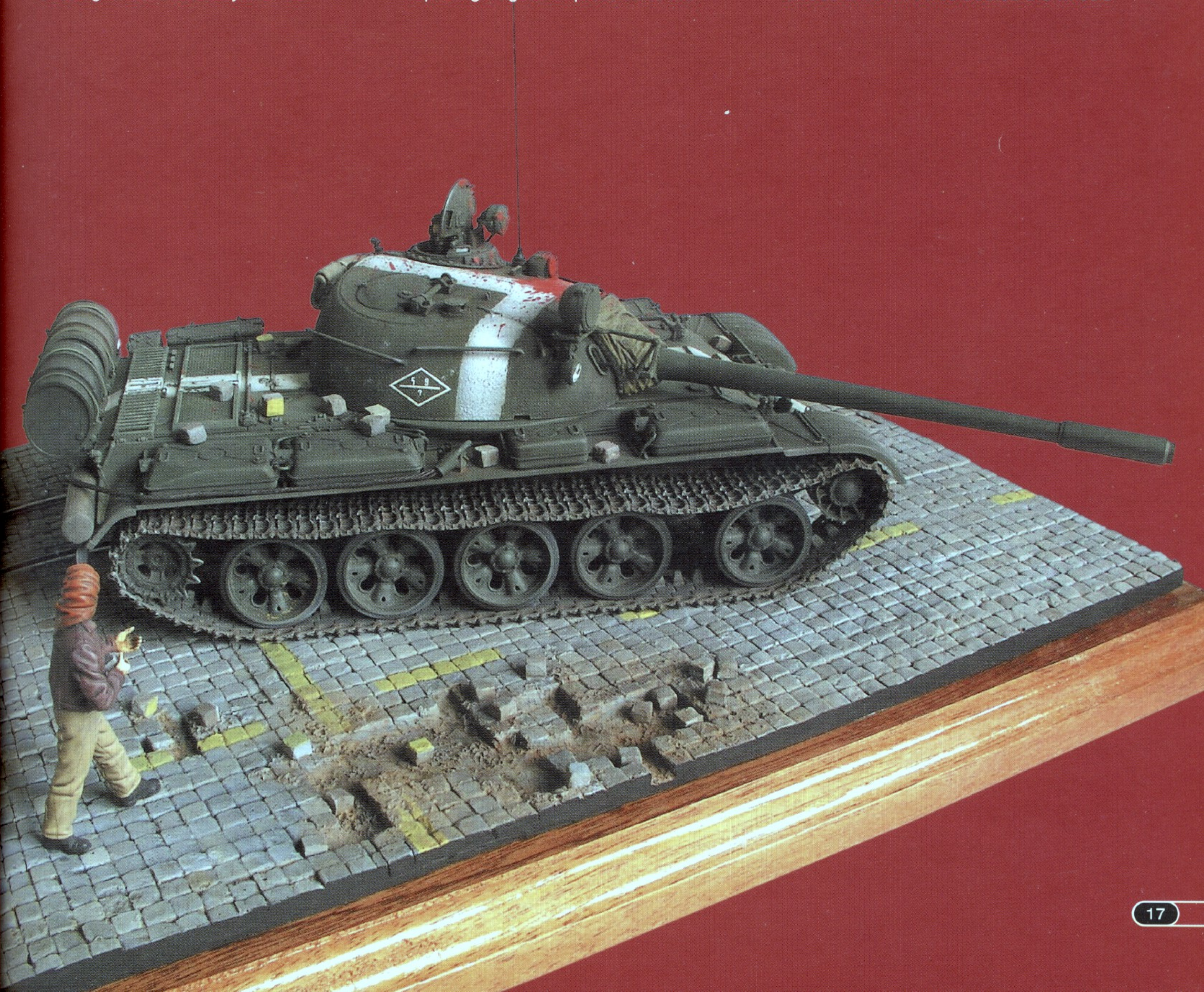
After this run through I must once again point out that this kit makes a beautiful T-55 OOTB. The fit is very, very precise and the overall quality of the parts is nothing but extremely high! Still, there's nothing that cannot be improved, is there?

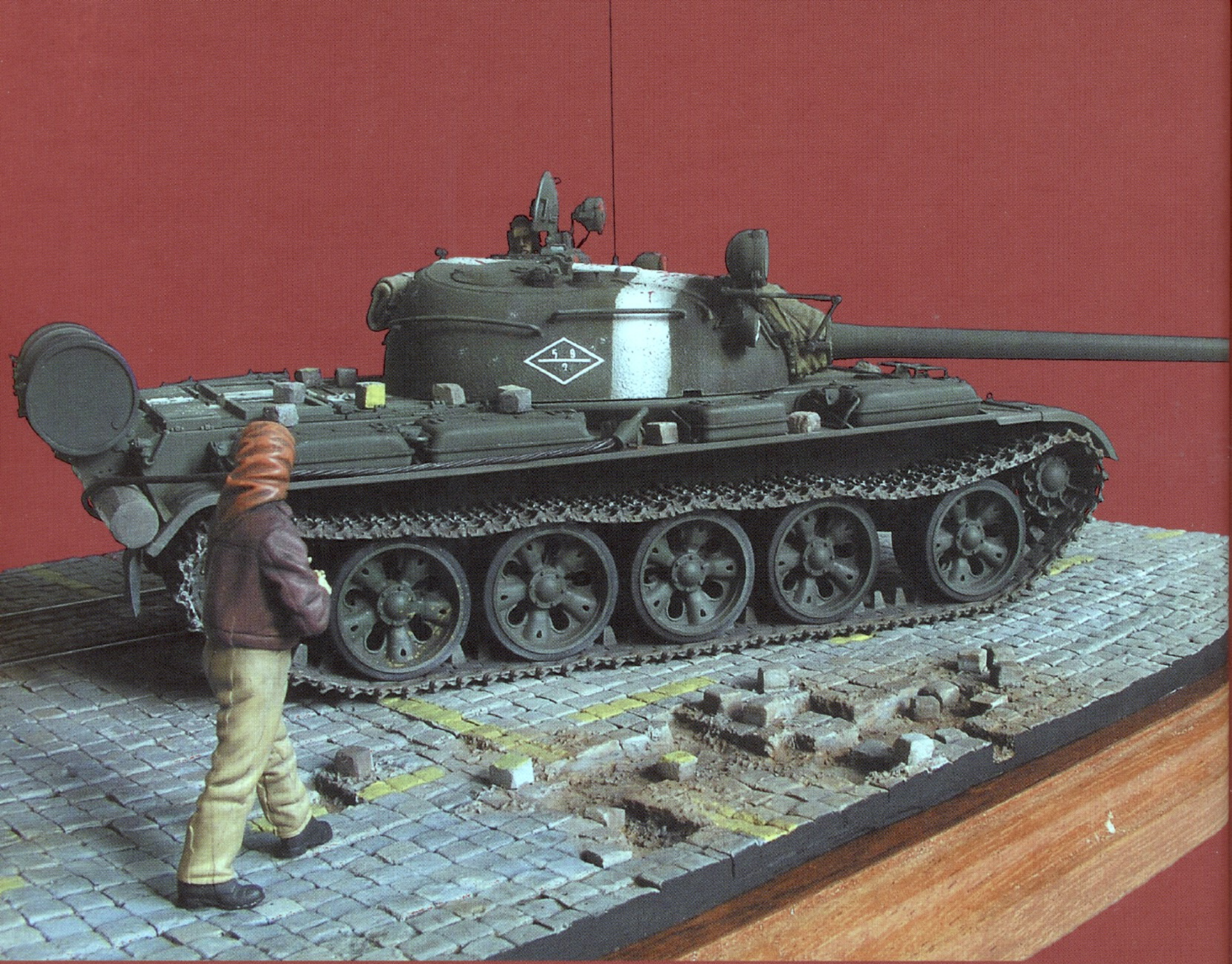
PAINTING

As a regular Soviet WWII modeller I was once again confronted by the ”OD syndrome”. A completely olive green tank isn't automatically boring, far from it, but I find it challenging to do something extra in order to spice it up a bit. Whitewash is one way to go, battle damage and burnt out hulks another.
For starters, the Prague setting includes the white identification stripes. Marek Solar kindly supplied me with a number of photos of T-55s confronted by the upset crowds in Prague and one photo clearly shows a tank stained with paint. A number of photos were showing people throwing cobblestones and some documented tanks set ablaze. I settled for the ”paint and cobblestone” treatment. Together with the invasion stripes this would add something to eliminate the ”OD syndrome”.

Another important aspect was to try get a fairly new look. These were maintained vehicles and furthermore the Kremlin knew the world should be watching and reporting. A good impression of the invading forces was important. What I aimed for was a tank that indicates many years service, but under peacetime conditions, probably repainted somewhere along the way.
I started by painting the whole vehicle with Humbrol No.75 Bronze Green. Then I airbrushed a thin layer of satin varnish over the whole tank and heavily diluted gloss varnish on places were the light tends to reflect, like curved plates, the gun, headlights etc. Next step was to paint detail like black rubber hoses on the fuel lines, black rubber rims on the road wheels. I always mix some flesh in the black paint. Pure black gives a totally wrong impression of rubber.

Now it was time to start the weathering. I did some dry brushing with lighter shades of No.75 on the flat areas and tried to avoid all the raised detail. I prefer painting raised detail with diluted paint instead. I find it gives more control and the result isn't so uniform. I also treated the wheels





and part of the fuel tanks with a thin coat of pure oils like Terre Verte and Sap Green. This gives a slightly shiny, greasy look. A great complement to the varnishes.
After this had dried completely, I washed the whole model a number of times. Lamp black and Raw umber oils were used mixed with White Spirit.

I now took my Tamiya masking tape and masked off the white identification marks. These came in a number of different variants but photo references helped me settle for this option. I let these dry for a couple of days and with a fine brush a chipped the markings here and there. In reality they were painted by hand by the crews and weren't to sophisticated at times, others looking really fancy.
Again I washed with oils a couple of times and very lightly dry brushed with No.75 so it wouldn't look too perfect.
The tracks was painted with Humbrol No.98 chocolate and in thin layers with a couple of grey nuances, washed them with Raw Umber and very lightly with Burnt Sienna. Finally I dry brushed some parts of the tracks with silver.
So, finally here was the moment of truth. In my mind I had been thinking about applying that red paint over and over again. The tricky thing of course, is that you only get one chance. For a whole night I was experimenting with differently diluted paint and test catapulting it against a piece of cardboard. It's important to get everything as much as possible appropriate for 1:35. I used the same amount of paint that the tiny PE buckets could hold diluted it to the degree where it ran as naturally as possible. Once happy with the mixture I masked off most off the tank to avoid stains flying too far away, "loaded" the stiff old brush and hit the turret with two blasts, approximately 2cm away from the model. The result was OK, but I had to correct the look here and there and add streaks going down on the sides. I also custom painted the dragged paint at the bottom of the turret showing it has rotated a bit after the attack. The paint is fresh and in 1:1 very shiny. This has to be toned down in 1:35. Therefore I used matt paint and hand painted the stains afterwards using a brush and diluted gloss varnish.

There's not very much more to say about this. As usual you go over the model a few times adding this and that but, in this case, without any dramatic result for the finished product. After putting the MV lenses in place the tank was finished.

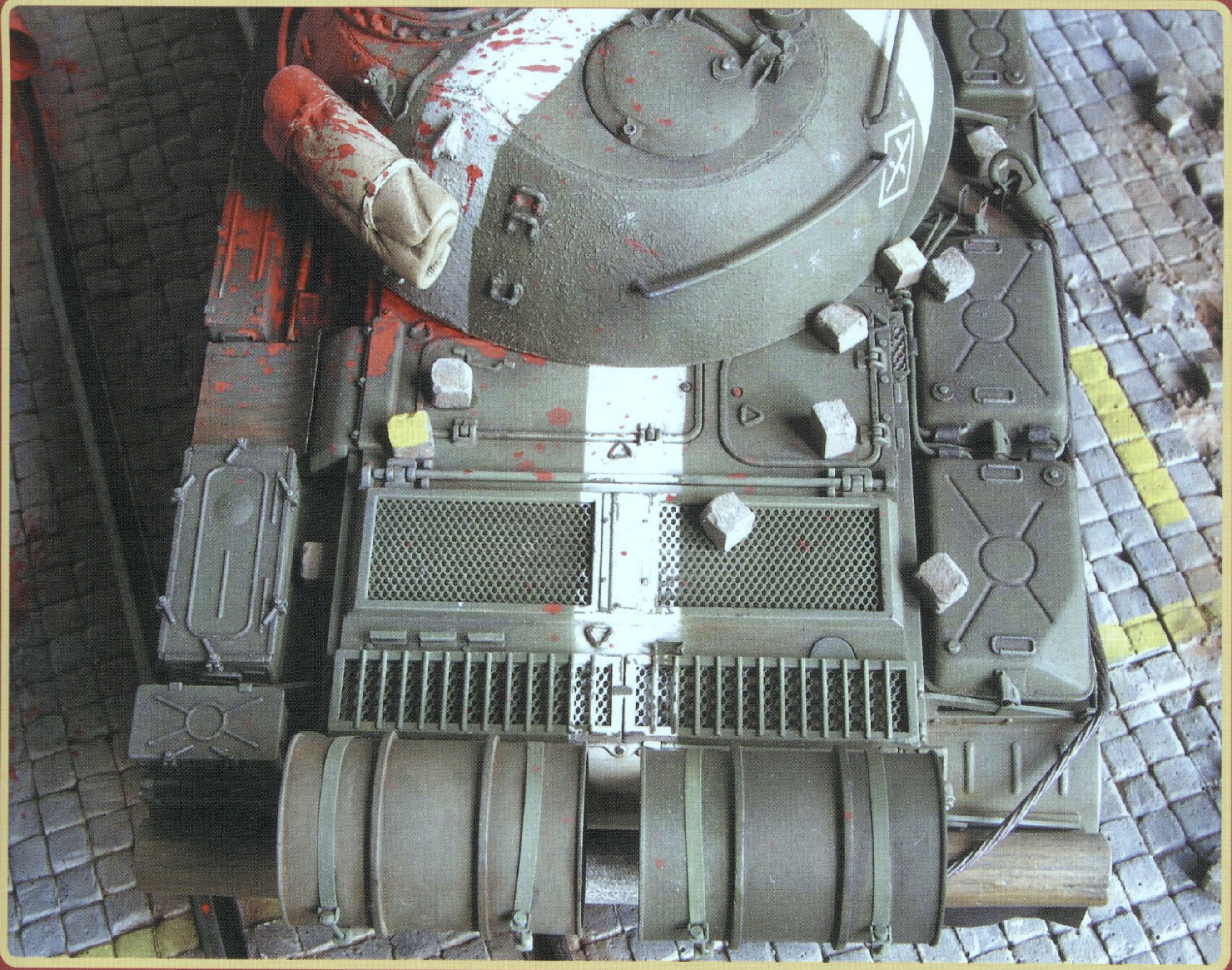
FIGURES

Dazed and confused the tank commander looks out from his cupola. "Hey what's going on we are liberating you guys". A Hornet head put on a spare torso. The facial expressions of those Hornet heads are truly delicate and in my opinion they are adding value to any model or diorama.

Civilians are difficult to come by. There are some, but 65 year old French farmers would look, well, sort of out of place... I decided to use the only one I found that I was 100% happy with, the Palestinian from Warriors. Clothes are typical for the time and the pose fits in really well. I replaced the gun and hands with new hands from Hornet and a cobblestone ready for delivery in his left hand. Rioting crowds nowadays usually cover their faces, like the figure, but I actually didn't find one Czech on the photos doing this. I might be a little out of place in this historic content.
I painted the figures with Humbrol and did all the shading with oils.

THE BASE

I really kept a low profile when choosing the groundwork, just a plain piece of resin cobblestone with tram tracks from Custom Dioramics. To add something and get the link to the guy on the street, I took the Dremel and drilled out a larger section of the street and one tiny one. Then a made a handful of cobblestones from Evergreen strips, each one sanded, roughened up with the Dremel and the odd corner cut away. I used Milliput to get the dirt texture under the removed stones and some dirt thrown up on the street. Then I put the stones in a random way in and around the dug up patches and some on the tank.
The base was then painted black and step by step airbrushed with different grey shades. I then used at least six different heavily diluted mixtures and gave more or less every stone a different tone. No dramatic variations, very, very subtle. Dry, the stones are very similar in colour. Wet, the variation is very wide spread. (at least here in Gothenburg...) I masked off the markings in the street and painted the stripes pale yellow. The tram tracks were painted with #98 and "Russian Earth" MIG pigments was used for the typical brown sections running parallel with tracks. I washed the finished base several times with Lamp Black and Raw Umber and lastly used graphite on the top of the tracks for a shiny effect.



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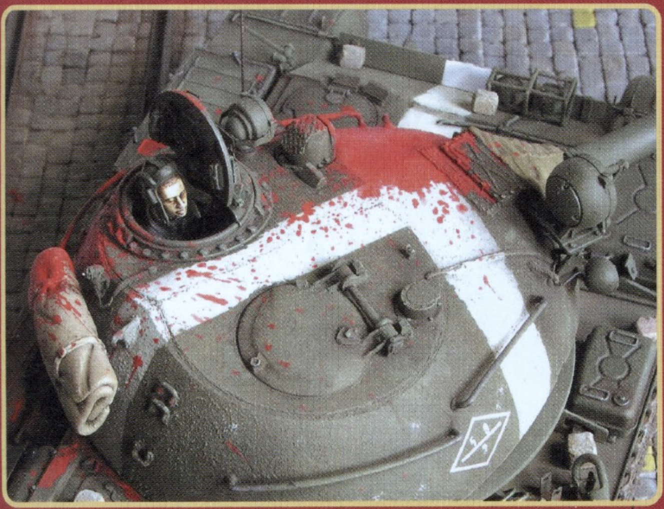
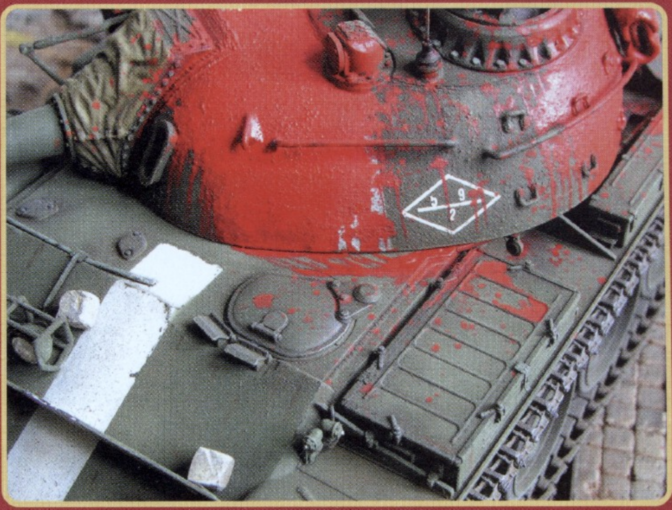
On top of all this and as a last touch I painted some red stains on the street and glued the PE buckets from Plus Model on the same side as the red assault on the T-55.

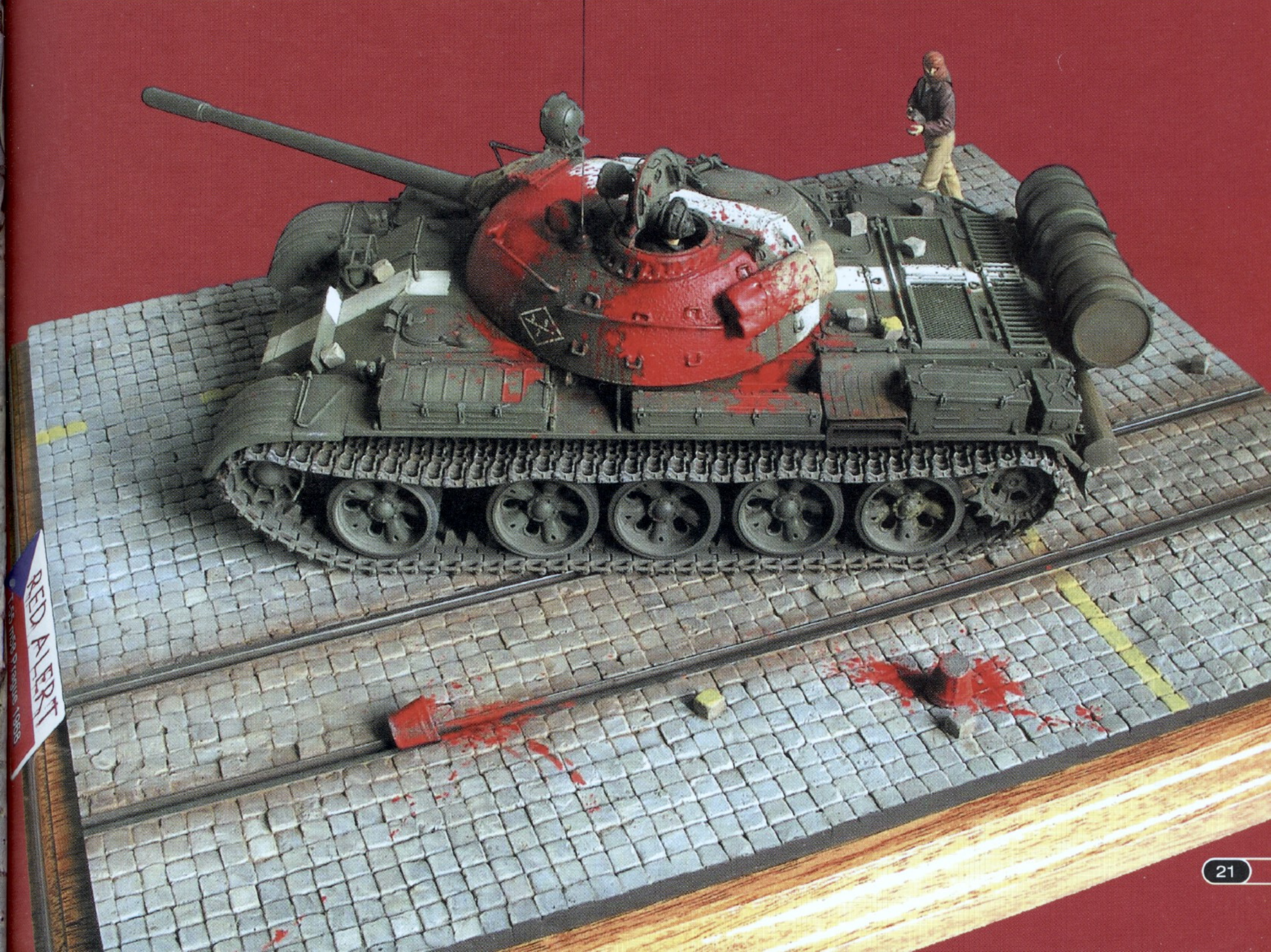
CONCLUSION

A very basic, straightforward project as far as construction goes. Slightly more challenging as a paintjob. To get a new look on a tank is actually very difficult. It's not a question of getting the basecoat in place, paint the detail and add decals. New tanks live as much as heavily weathered tanks do, but in a more controlled, subtle way. Weathering a brand new tank is very important. Vehicles like a tank are never, never to be compared to a Ferrari. This is difficult to get right and this model was at times a grim reminder to me. Still, every time you are confronted with something new I think you grow as a modeller and failures tends to learn you more than success. What a great relief for us modellers!

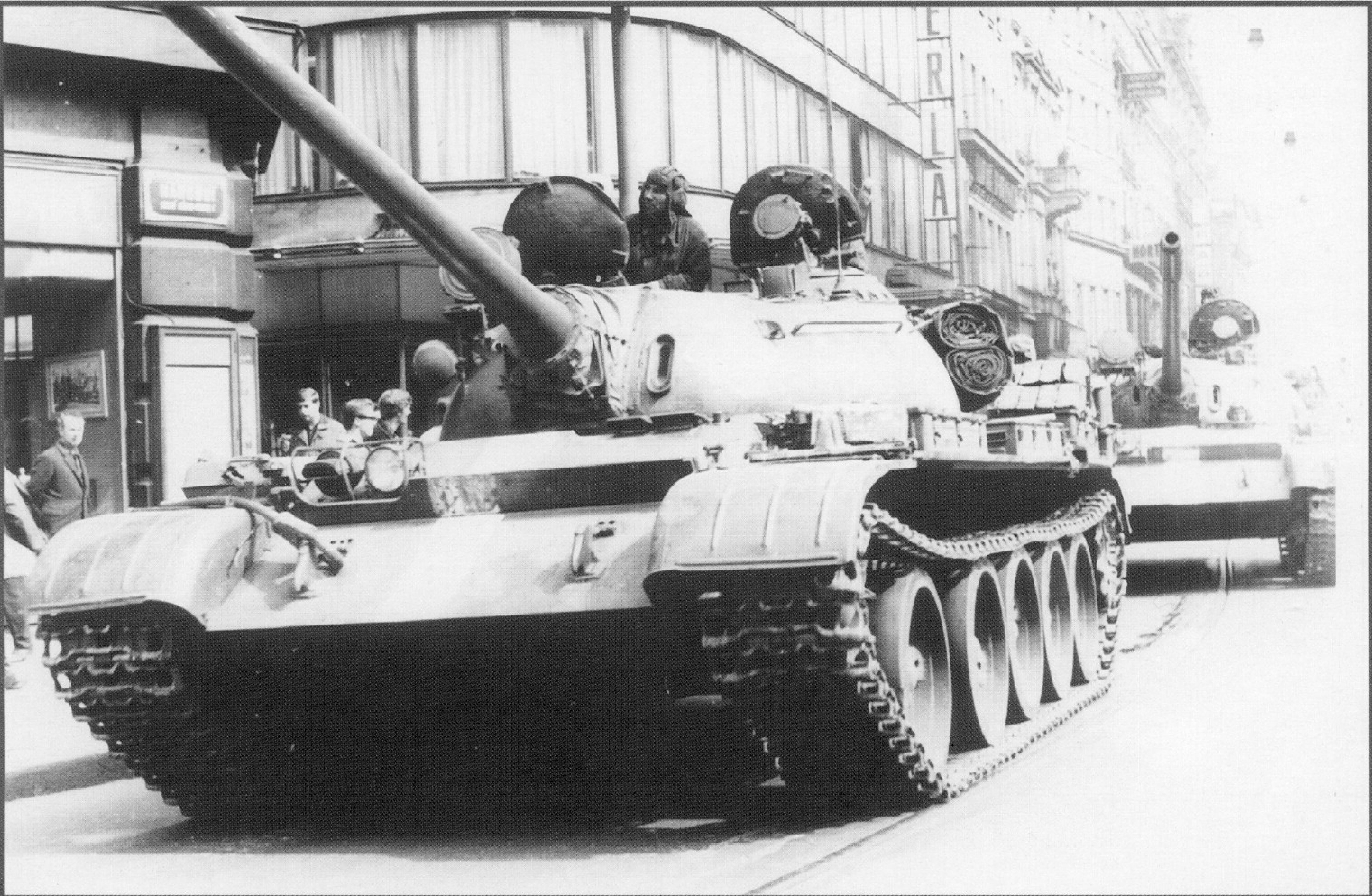
Oh, the name? The paint thrown on the tank. The mood of Czech people. The symbolic colour of the invading forces. They all called for RED ALERT!







Something for T-55 enthusiast - a beautiful photo of a T-55 running down a Prague street. You can just make out the white invasion strip on front hull. The photo was taken at Jungman Square.

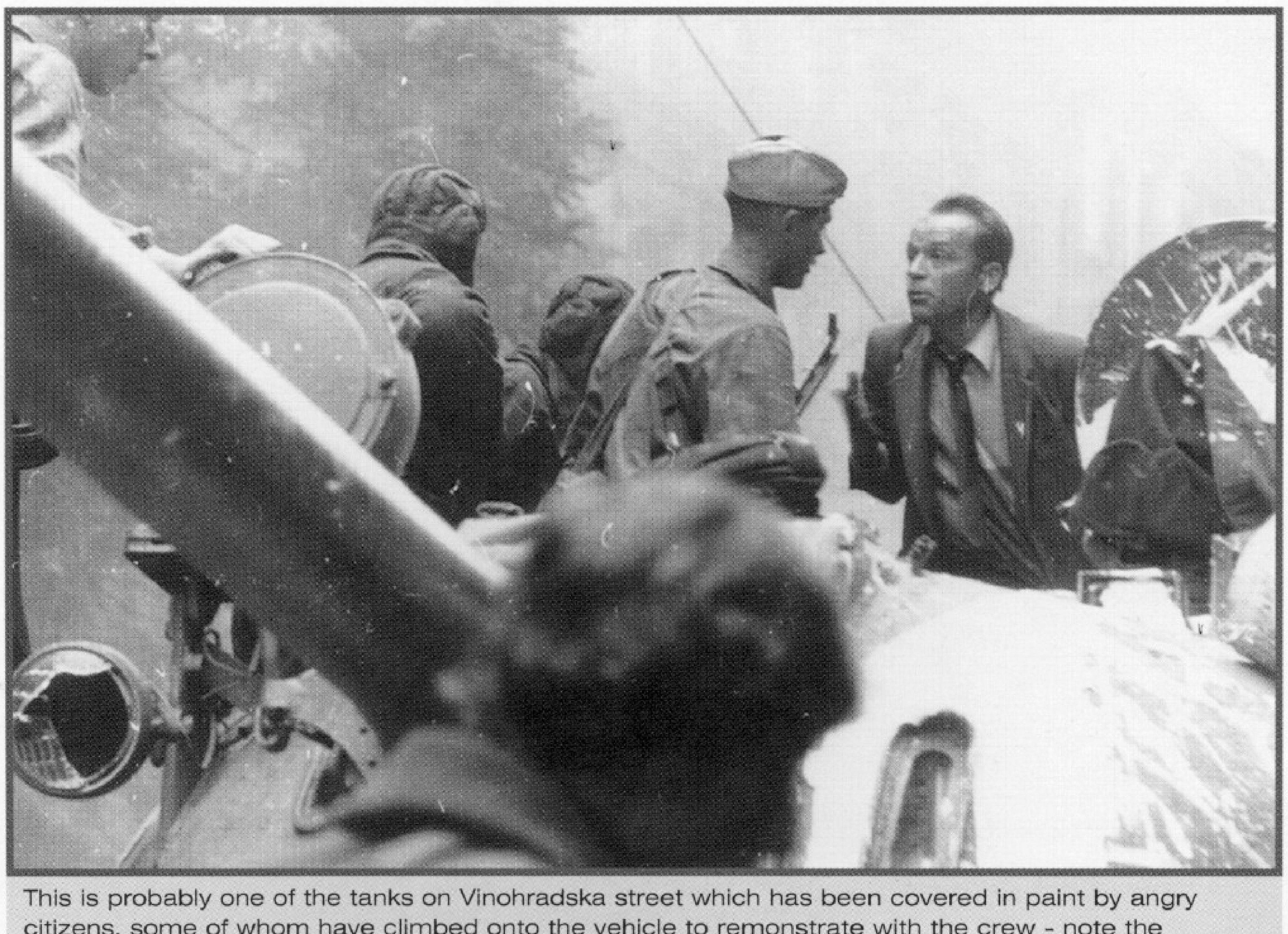


Prague 1968

Marek Solar describes the events behind these dramatic images

21st August 1968 was the day marking the start of the foray of five 'friendly' Warsaw armies into Czechoslovakian territory. The operation with the code name 'Danube' had already been planned in Moscow in May 1968. Its main task was to stop the democratic processes which were approved by the Czechoslovakian goverment members. prior to the operation the Warsaw forces had been on maneuvers from 22 June till 10 July.

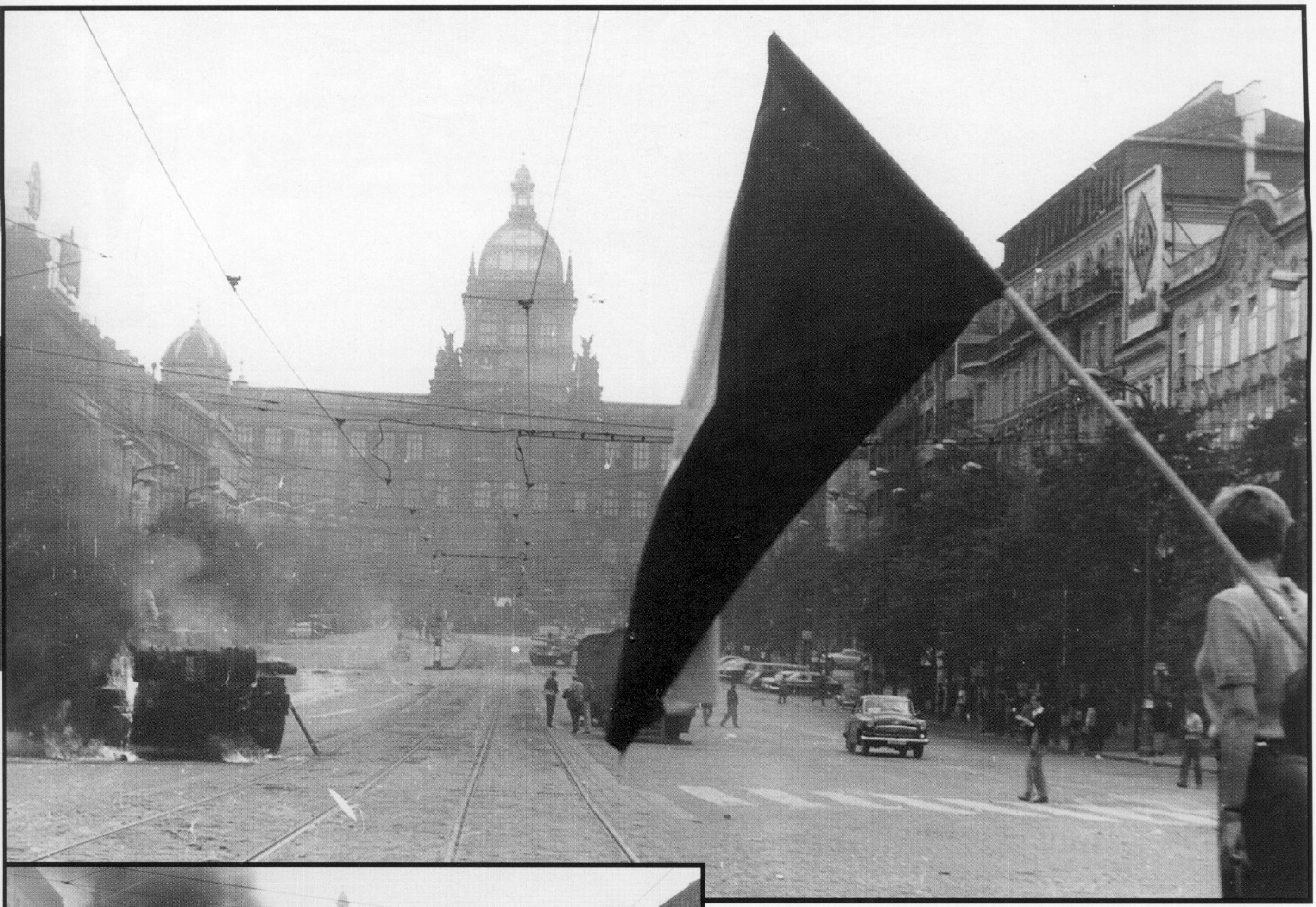
Operation 'Danube' began with the occupation of the civil airports in Prague (Ruzyne airport) and Brno city late at night night on 20th August 1968. Around 23.00 7th Paratrooper division equiped with ASU-57 light self propelled guns arrived at

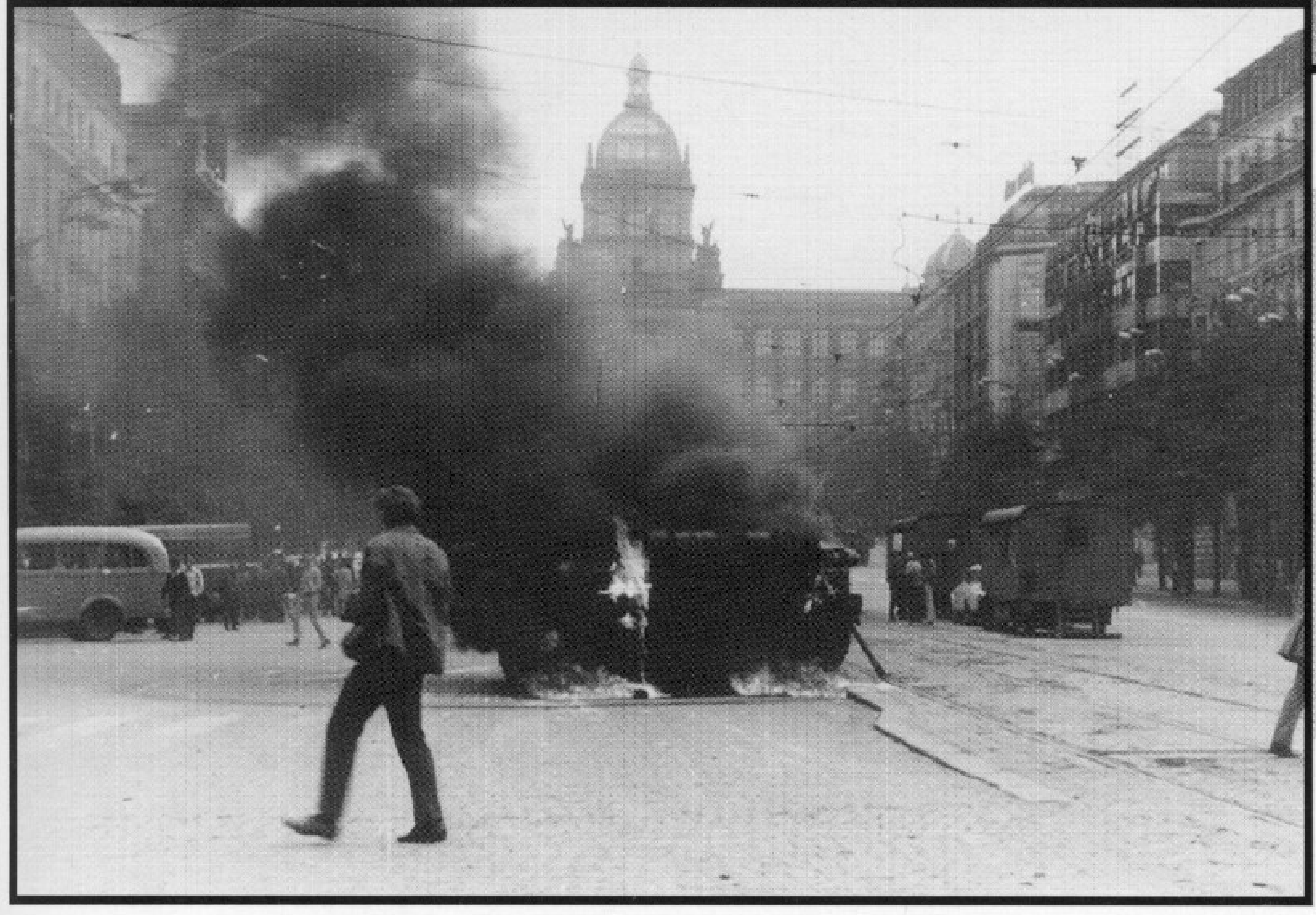


This is probably one of the tanks on Vinohradska street which has been covered in paint by angry citizens, some of whom have climbed onto the vehicle to remonstrate with the crew - note the smashed searchlight lens.

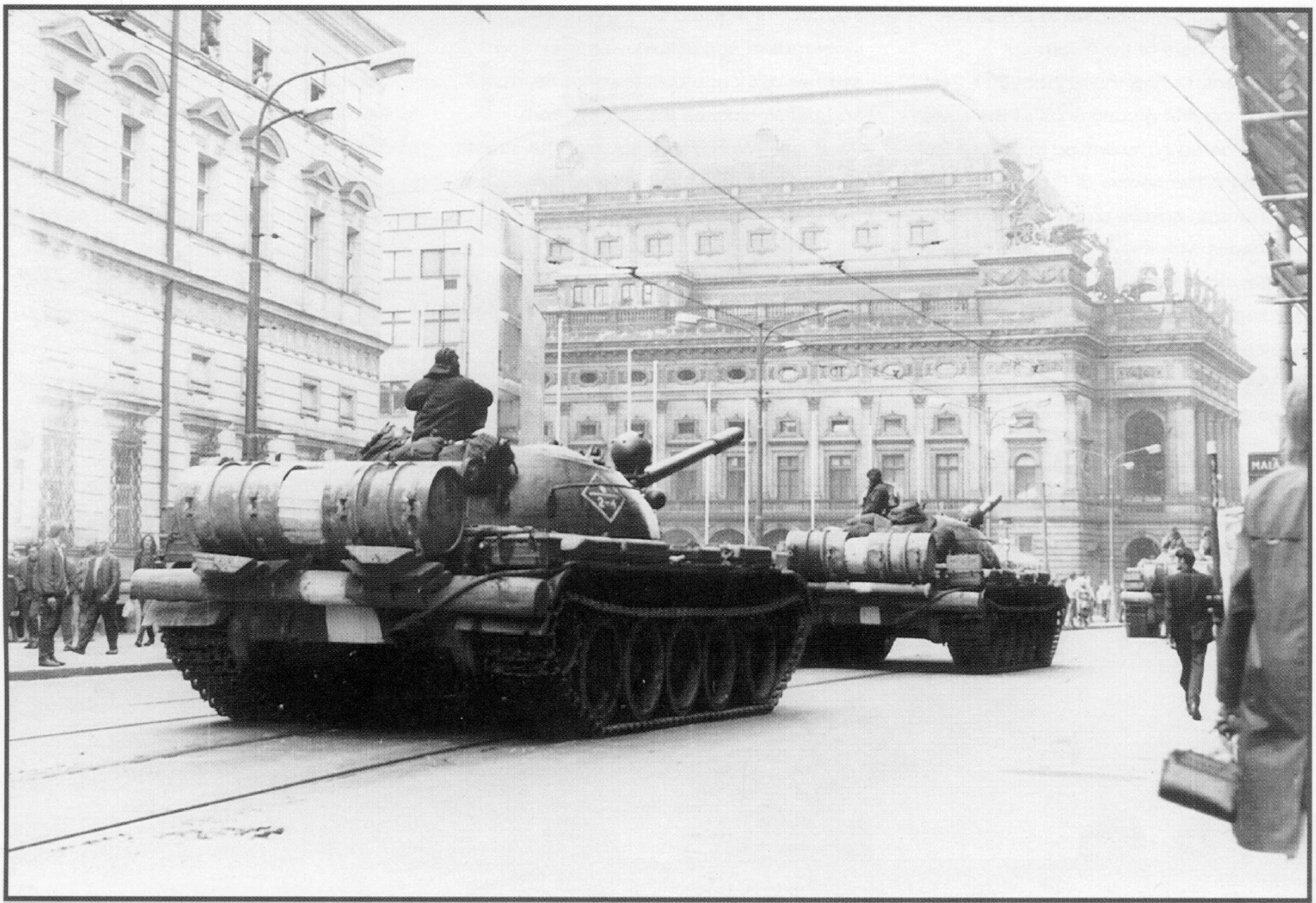
Ruzyne aiport with orders to arrest the main members of the reformed goverment. During the night of 20 - 21st August the first ground units of the soviet 20th armored army arrived in Prague from the North. The people of Prague reacted to the Russian armies arrival by building barricades with the most dramatic events happening in front of the Prague radio building on Vinohradska street. The first barricade built from tram and bus blocked off Vinohradská and Italska street crossroad. Another two barricades built from trucks blocked off the crossroads at Vinohradska and Balbinova street, and another barricade built from trams, trucks and buses blocked the exit out from Vaclavske (Wenceslas) square. The streets of Prague streets were filled with people from early that morning.

The first T-55 tanksarrived at Vinohradská street around 8.00 am on August 21st and they stopped in front of the barricade at the Vinohradska and Italska crossroad. The Tanks had rhomboid symbols with number unit codes on their turrets, and they were joined by other tanks with square symbols and unit codes on turrets and it was these tanks which first attempted to drive through the barricades. A tank with white turret number white 212 and square unit code 5/3-4 reversed against the bus. During repeated collisions the bus fuel tank was punctured and the spilled fuel was ignited by the hot tank exhausts. With its engine deck in flames, tank no. 212 drove to the front of Prague radio building where the crew were forced to evacuate it.

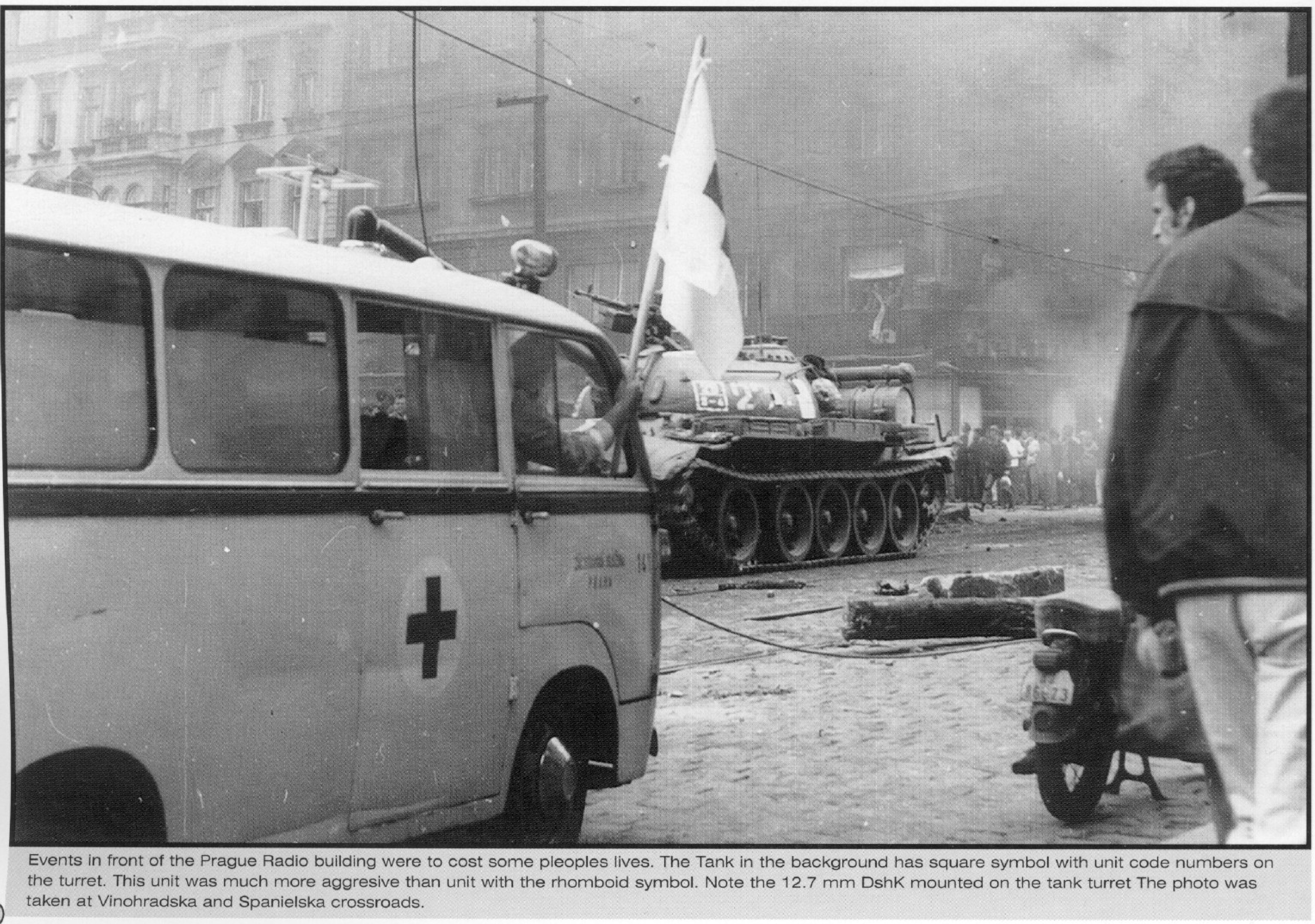




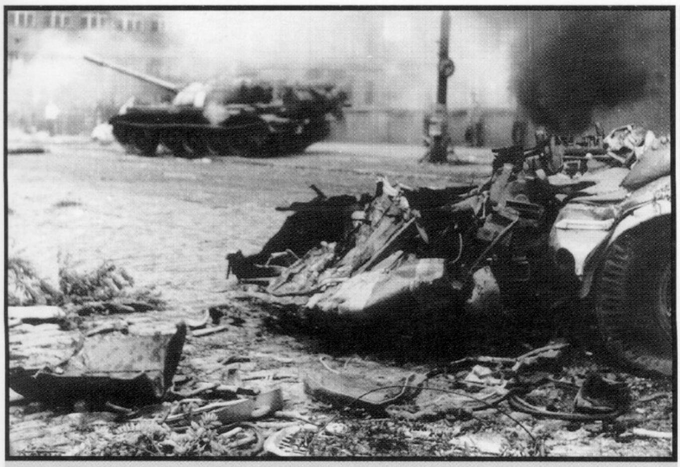
Two views of a burning T55 in Wenceslas square which was set on fire by protestors. The main antitank weapon used by the protestors was the pick taken from tank OVM eqiupment. These were used to puncture the vehicles fuel tanks. In the top picture you can just make out another T55 facing down the hill.



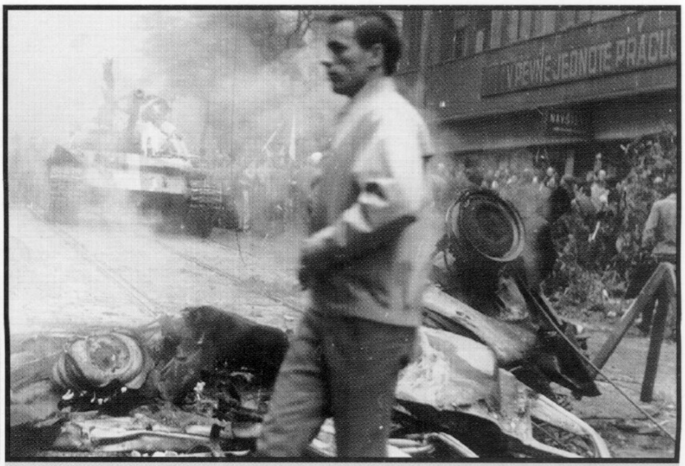
A colomn of T-55 tanks in front of the National theatre in Prague. The rhomboid symbol with unit numbers is very visible on the turret. Tanks with the same symbols were also seen in front of Prague radio building on Vinohradska street.



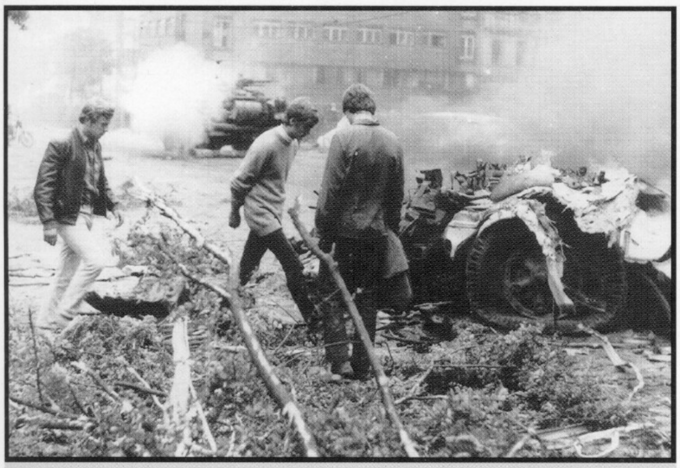
Events in front of the Prague Radio building were to cost some pleoples lives. The Tank in the background has square symbol with unit code numbers on the turret. This unit was much more aggresive than unit with the rhomboid symbol. Note the 12.7 mm DshK mounted on the tank turret The photo was taken at Vinohradska and Spanielska crossroads.



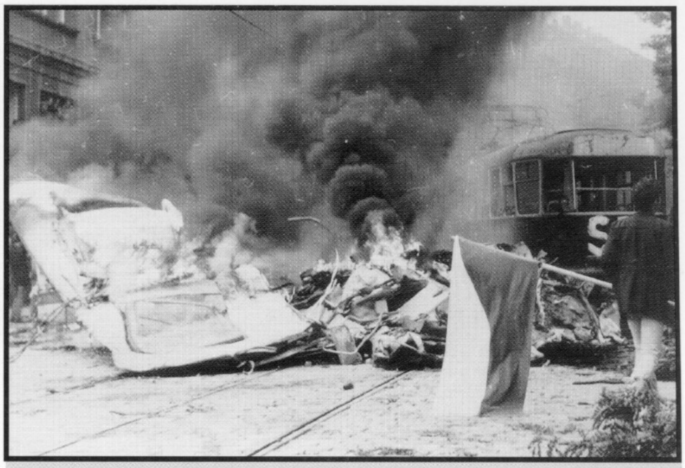
The remains of an RTO bus which formed part of a barricade on Vinohradska and Italska crossroads. In the background aT-55 moves past.



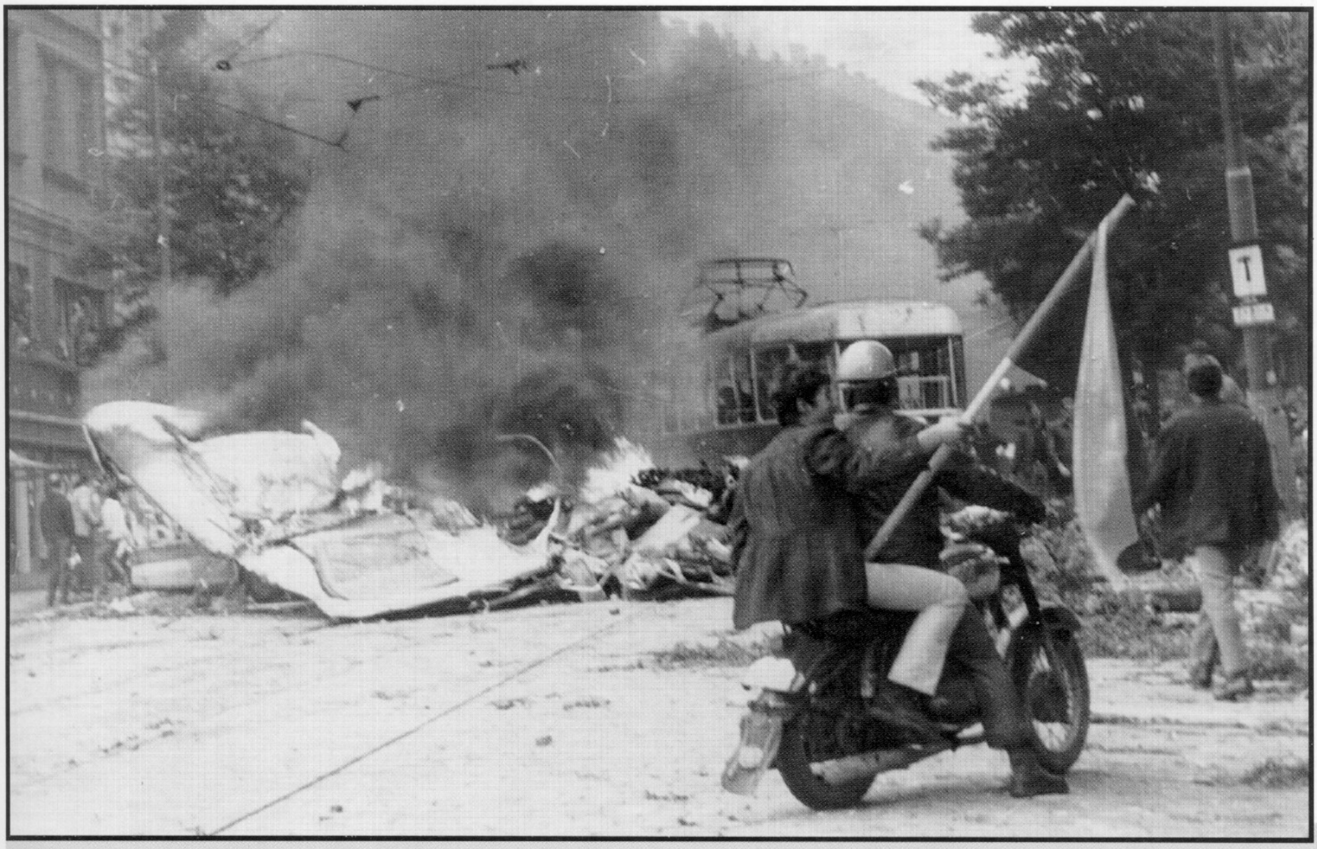
Another wrecked barricade with the remains of a car. It is probably view at one of barricades placed on Vinohradska street



Protestors pick their way through the reamins of the barricade as the T55 continues down the street in a cloud of exhaust fumes.

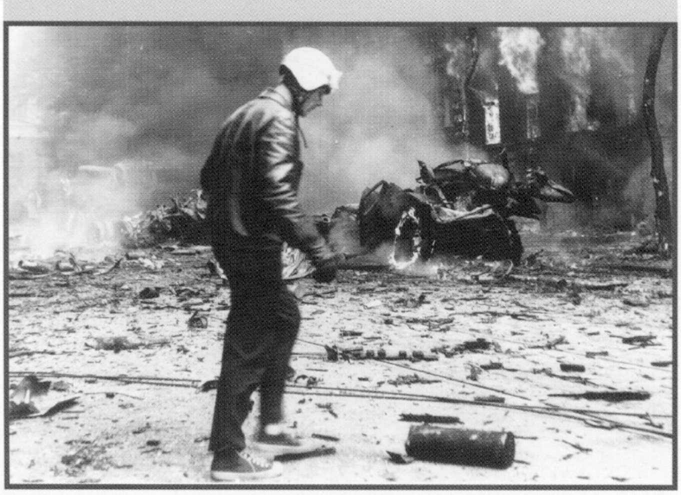


This pile of sheet metal which was formerly a RTO bus and a tram which was also a part of barricade. This photo was taken around 10.30 am

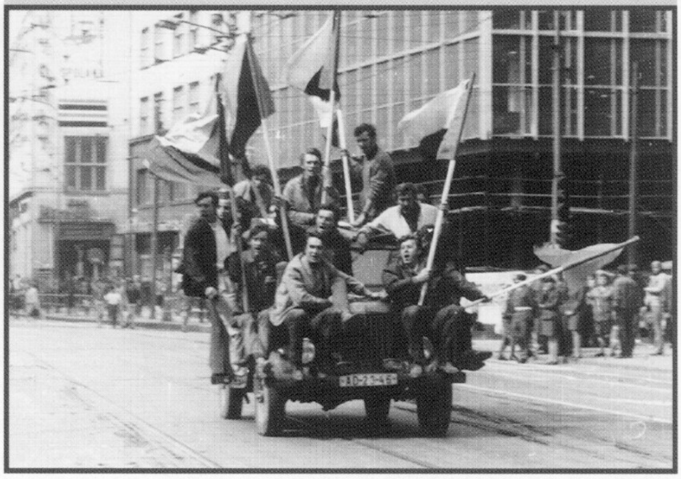


A view of the barricade placed at Vinohradska and Italska crossroads

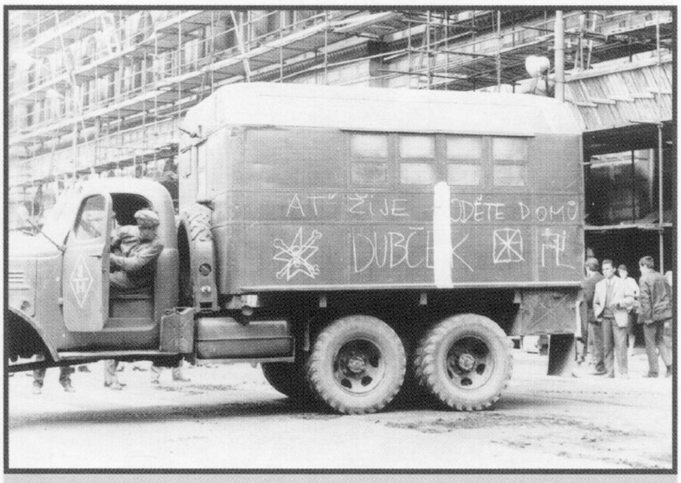
Buildings were also burning on Vinohradska street.



State flags were a symbol of resistance. The photo was taken on National Avenue – Spalena and Na Perstyne crossroad – in the backround we can see Albatros building and Palace Metro



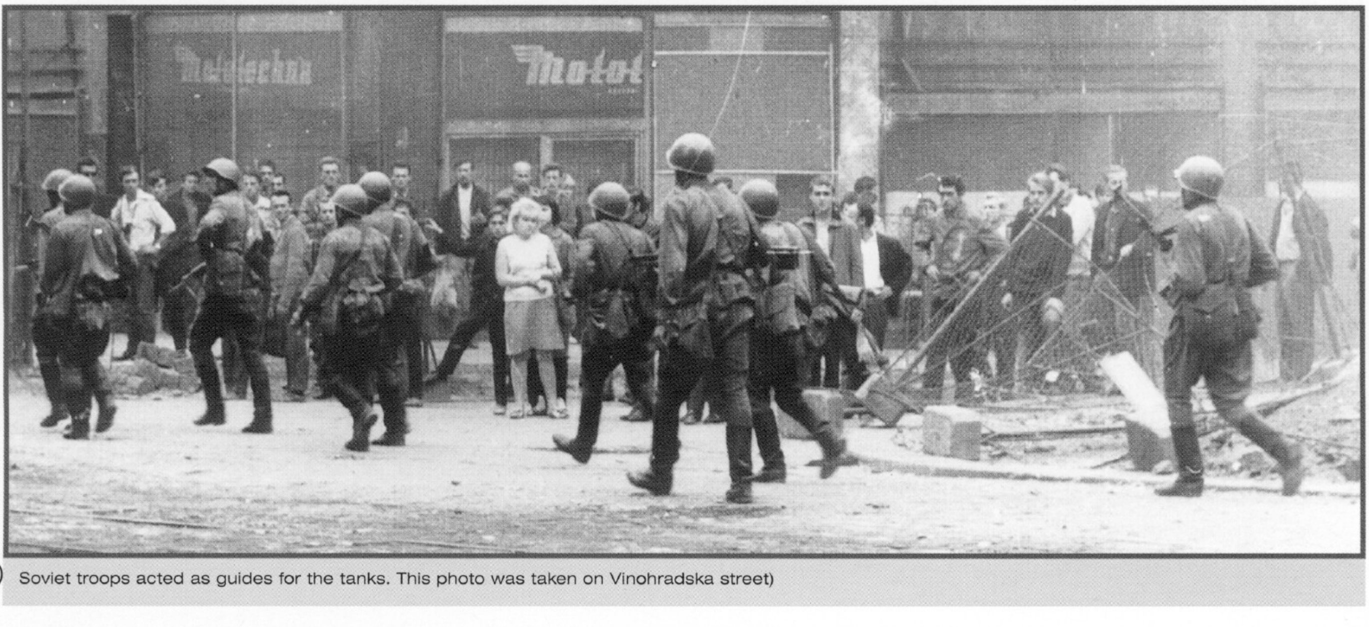
The same group of protestors seen at Perlova street (Pearl street)



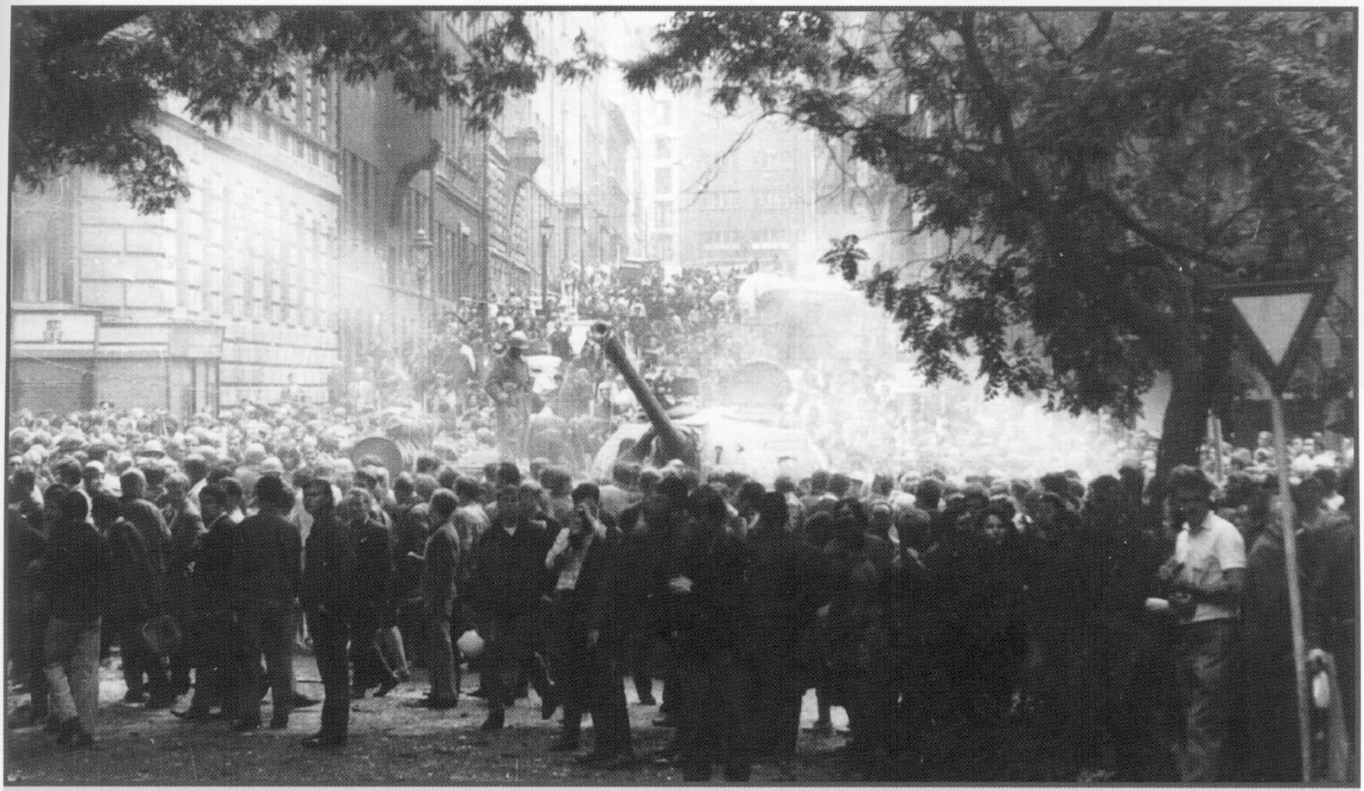
Sovjet Zis Truck on National avenue in front of Academy of sciences building

The burning tank hindered the advance of the other Russian tanks and armored tranport so it was pushed by another T-55 with turret no. white 6 and square unit code 24/5-2. During this proceedure the rear fuel drums of the second T55 also caught alight however the crew were able to successfully extinguish the flames. Tank no. 212 was eventually pushed to Balbinova Street where it continued to burn until the fire set off the ammunition causing an explosion. Tradgically this explosion panicked the Russian forces who opened fire killing several Czech civilians. By this time Russian troops had begun to occupy the Prague radio building, and Russian paratroopers arrived on ASU-85 self-propelled guns. The SPG's also tried smash through another barricade which was reinforced by a TATRA T-111 fuel transporter truck. This unmanned truck caused another tragedy when it crushed some people. The actions of the ASU-85's caused a fire on the barricade which spread to two nearby buildings.

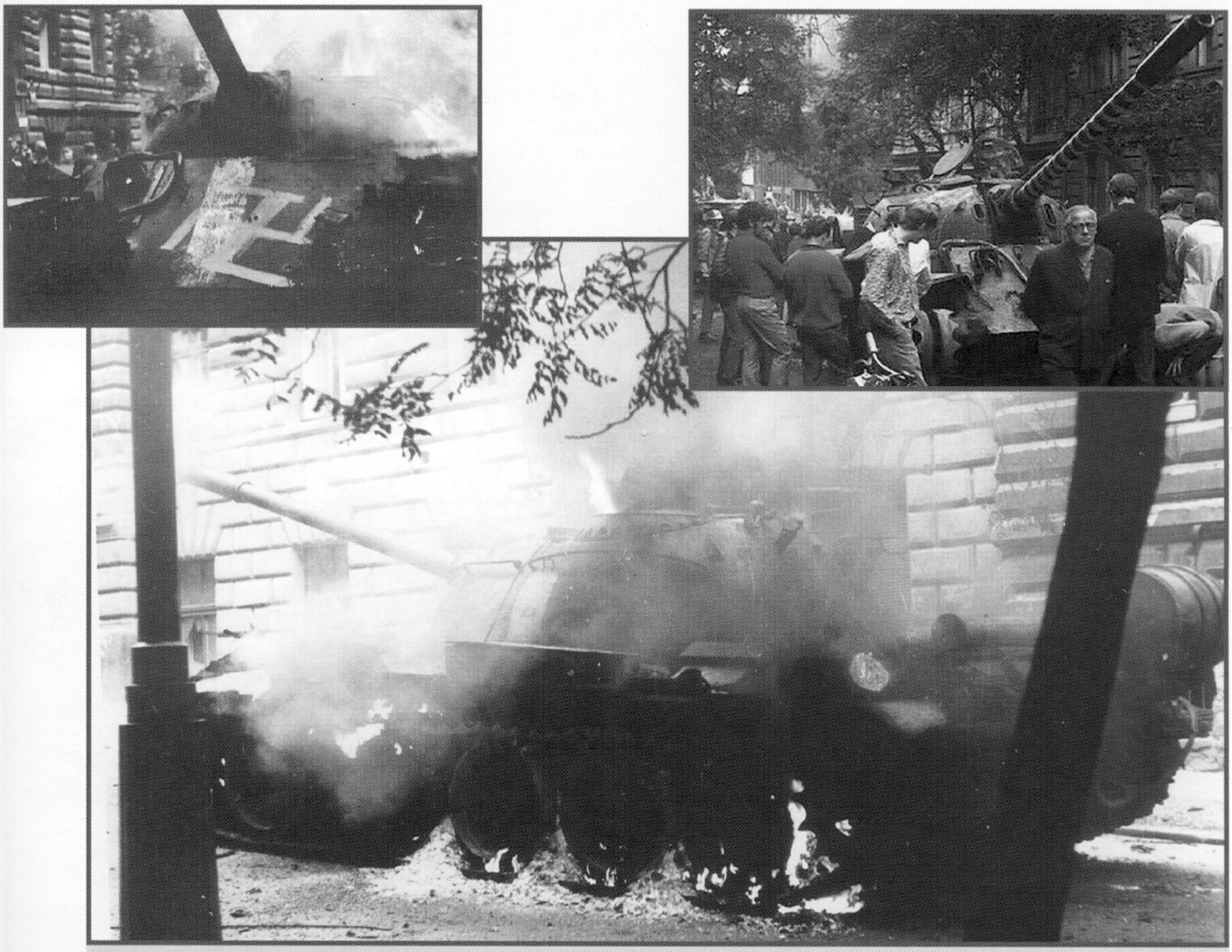
There were similar events and scenes of resistance in the other Czechoslovakian towns but these photos show the dramatic situation in front of Prague radio building which was focus of the organizated rizistance by the people of Prague.



Soviet troops acted as guides for the tanks. This photo was taken on Vinohradska street)

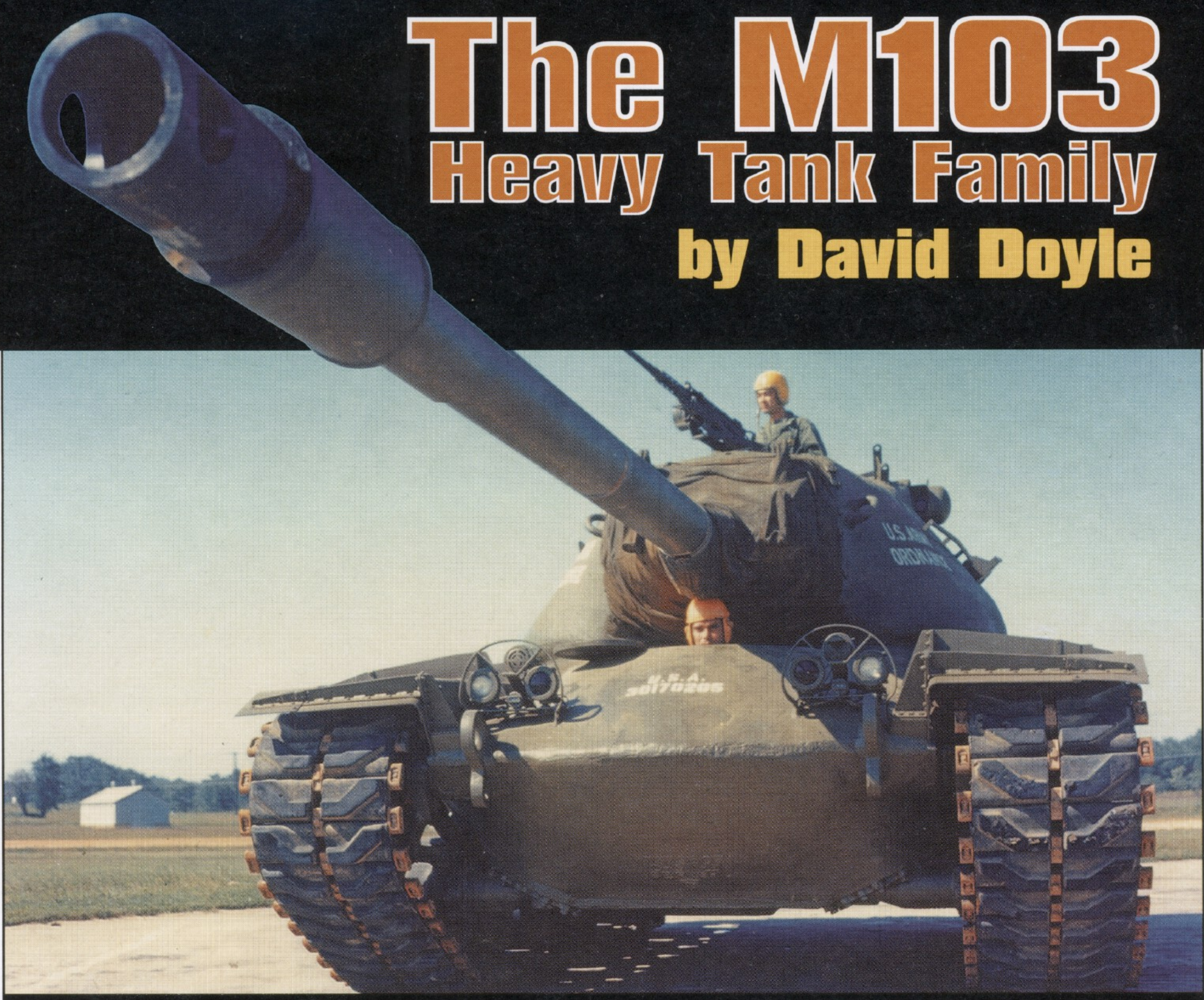


Prague pleople surrounding Soviet tanks at Vinohradska Street - viewed via Balbinova Street at Peace square



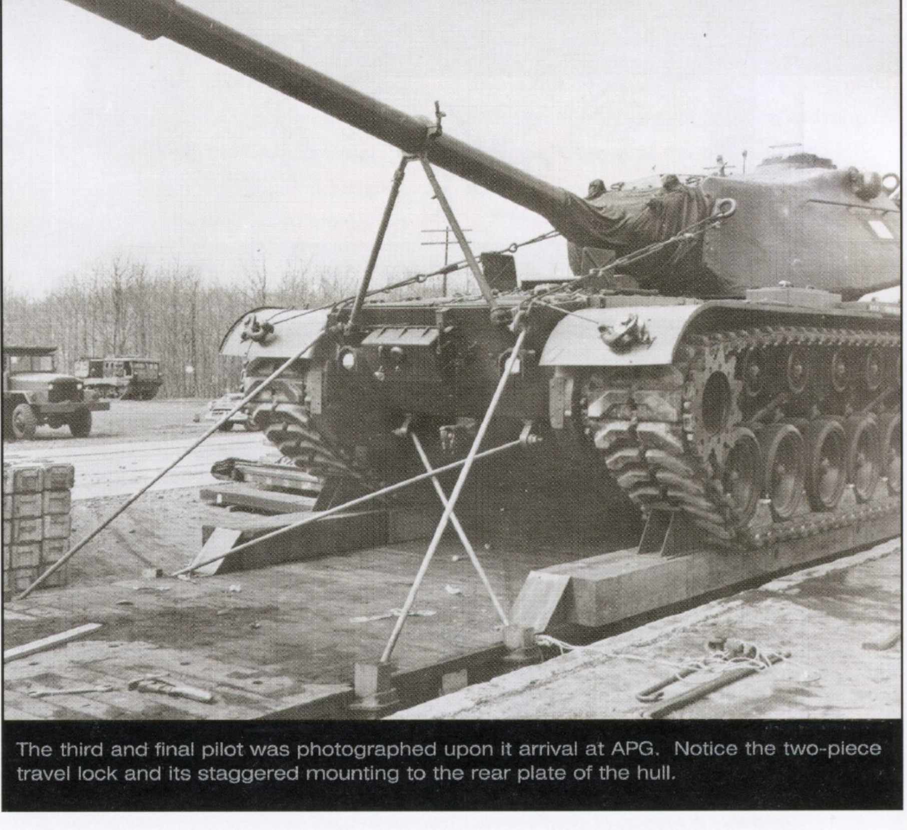
A burning T-55 with turret call number white 212 at Balbinova and Manesova crossroads. This tank was the first which tried to run through the RTO bus at Vinohradska and Italska crossroads. After it burnt out a white swastika was painted on the glacis and kill rings on the gun barrel (probably in memory of people killed). This was the only tank which completly burnt out.

The M103
Heavy Tank Family
by David Doyle

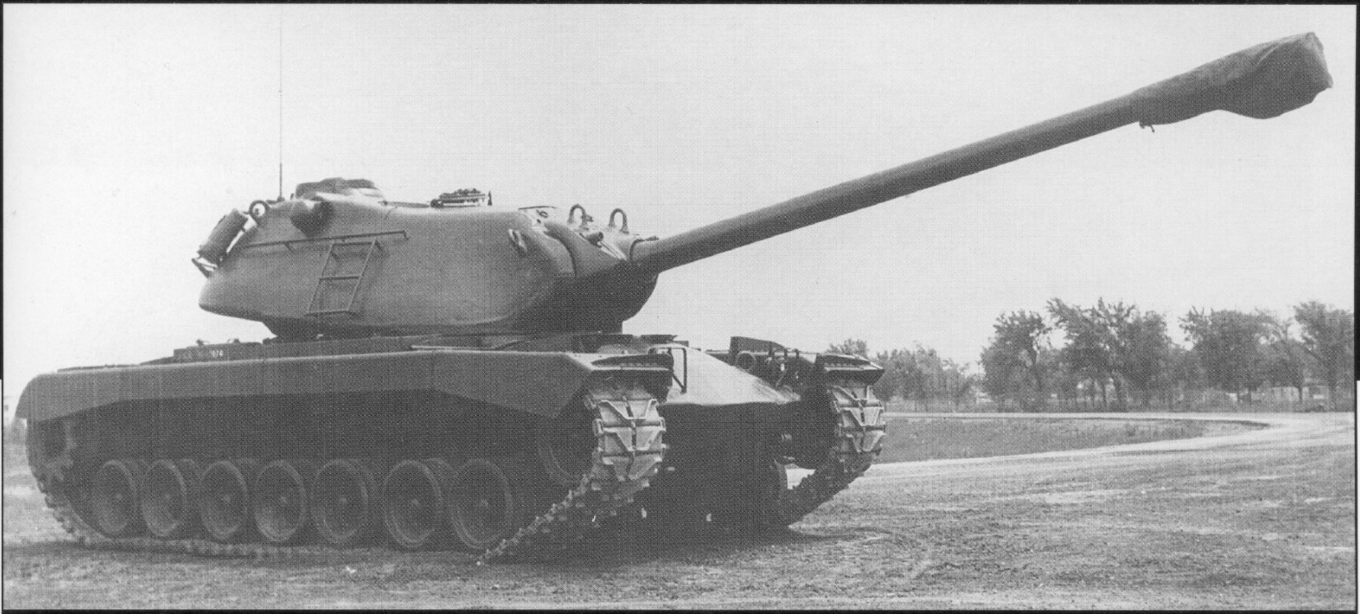


In September 1953, the T43E1/M103 was photographed at Aberdeen Proving Ground. Notice the light arrays on the bow, and the casting marks on the underside.

While the US Army began work on various heavy tank projects during WWII, the impetus of the M103 Heavy Tank was the Korean War. Grave concerns among the US military arose that this war would escalate, becoming a clash of superpowers. U.S. forces were without a tank equal to the Russian JS III heavy tank at the outset of the Korean conflict, thus work on what was to become the M103 was given a priority. Even though only 300 units were built, the M103 was to be the heaviest, and most heavily armed, tank fielded by the US until the M1A1 Abrams was fielded some 35 years later.



The third and final pilot was photographed upon it arrival at APG. Notice the two-piece travel lock and its staggered mounting to the rear plate of the hull.



The initial pilot vehicle of the US heavy tank T43 was photographed at Aberdeen Proving Ground July 7, 1951. This vehicle is still existent today, and is held in storage by the Patton Museum, Ft. Knox, Ky. Note the ladder welded to the side of the turret, a feature not carried over into the production units. This pilot was made of mild steel. Faintly visible is the track tension idler between the last road wheel and the drive sprocket, a feature not present on the production vehicles.

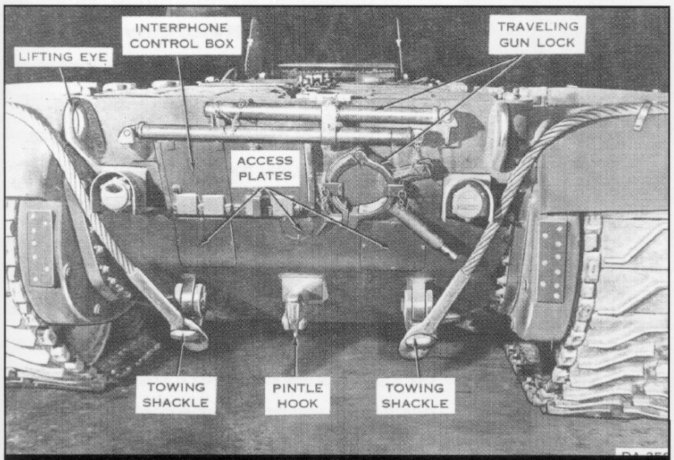
The Ordnance Committee laid down the characteristics of the new heavy tank, which was designated T43 at the time, in December 1948. These characteristics are recorded in OCM 32530. Mock-ups of the new tank, which had evolved to include an elliptically shaped cast steel hull and turret, were displayed at the Detroit Arsenal during the winter of 1949. After reviewing the mock-ups the characteristics were revised in April 1950. The T43/M103 very much resembles an oversized M48, with similarly shaped hull, but much larger. The M103 had one more road wheel than the M48 and had six return rollers per side.

The new tank was to have a crew of five consisting of a commander, driver, gunner and two loaders. The two-man loading crew was needed to handle the separate projectile and propellant charge of the two-part 120mm ammunition. The next major change came about in November 1950 when the US Army changed the method used for tank classification, abandoning a weight-based system in favor of a weapon-based system. The T43 Heavy Tank became the 120mm gun tank T43. The next month, spurred by the situation in Korea, orders were placed for 80 of the untried tanks. This was later increased to 300 units, to be produced at Chrysler's Newark, Delaware tank plant.

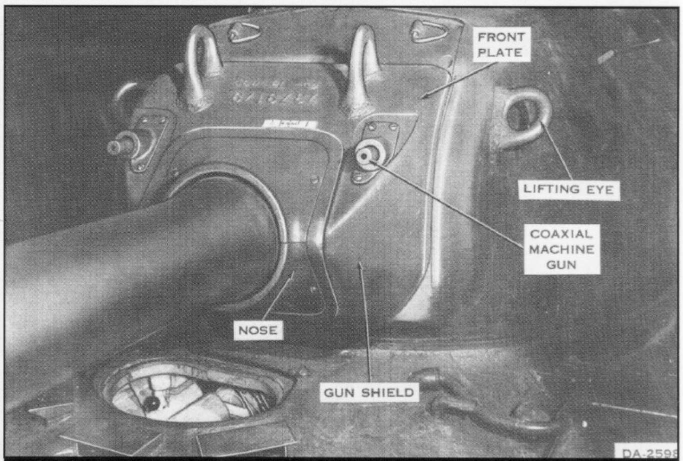
Initial testing of the pilots was done at Aberdeen, and as a result of those tests many changes were to be incorporated into the production vehicles. Because of these changes in July 1952 the production vehicles were redesignated T43E1.

Testing was done at Ft. Knox using pilot number 6, as well as the eighth production tank. The results of these tests were less than satisfactory. In fact, the test report deemed the T43E1 unfit for army use.

Most of the problems were attributed to the main gun sighting and gun laying system. Other problems were related to the exhaust of the main engine heating the turret when in the gun forward position, and the auxiliary engine exhaust entering the turret when in the travel position.

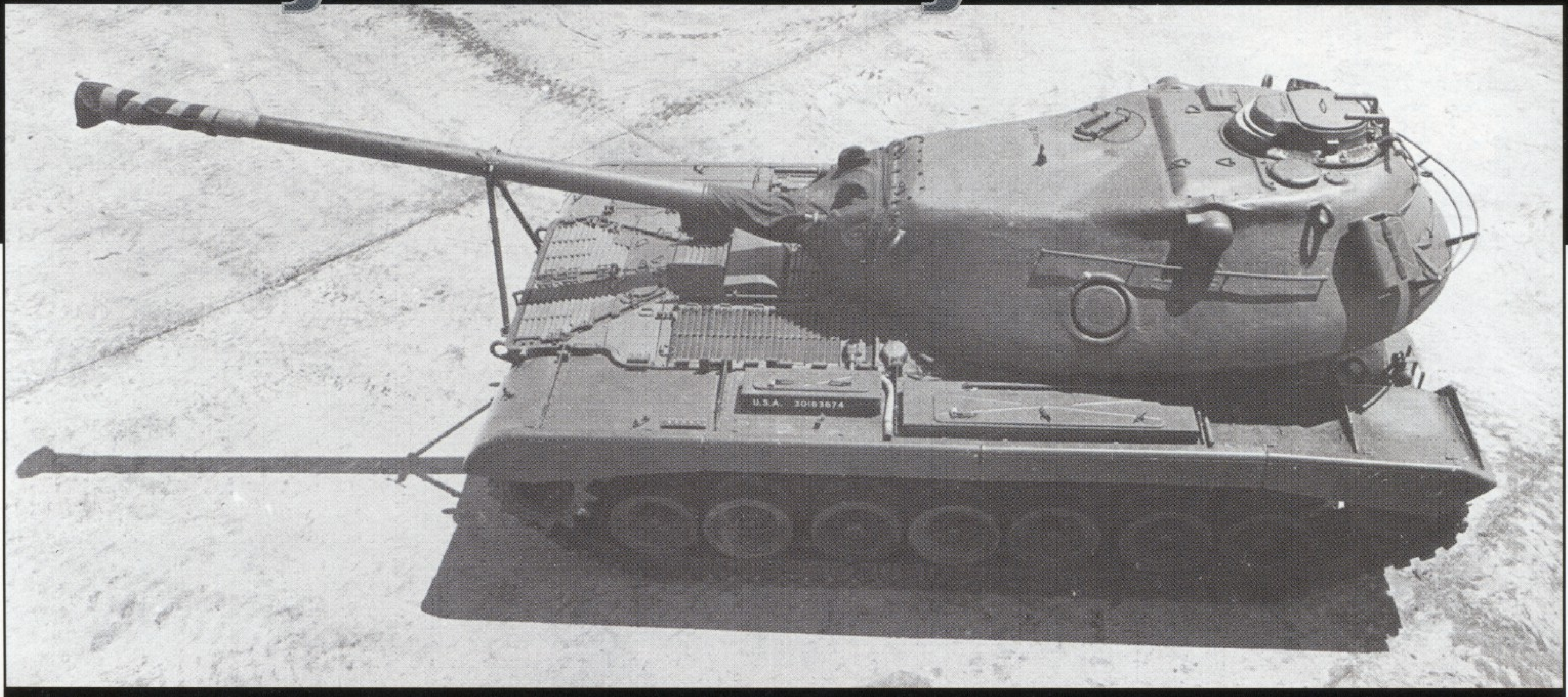


When not in use, the travel lock would break down and fold against the hull rear as shown here.

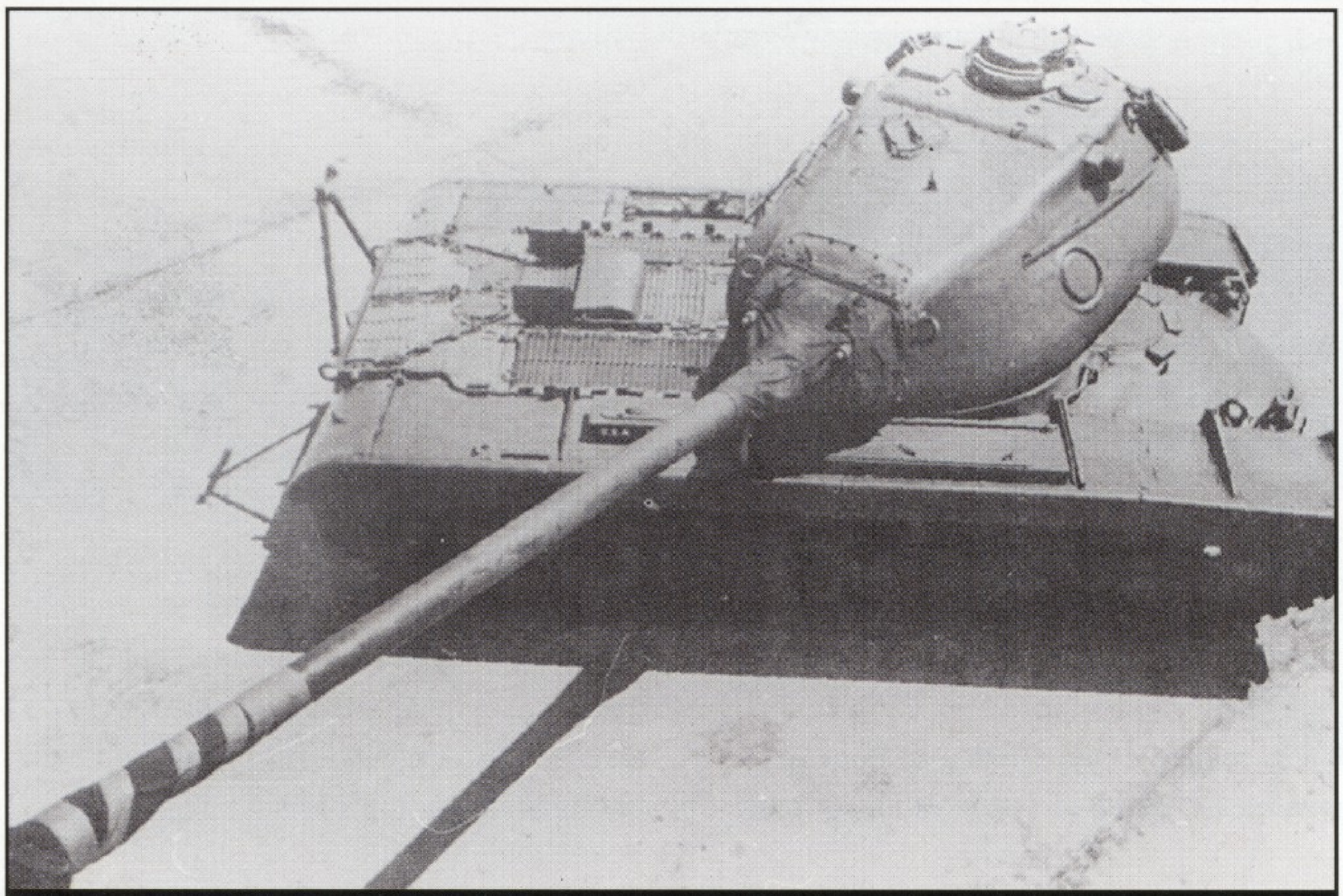


The pilot had dual coaxial machine guns, as seen here. Just to right of the label "gun shield" can be seen the short outlet for the bilge pump and the longer exhaust for the auxiliary power unit.

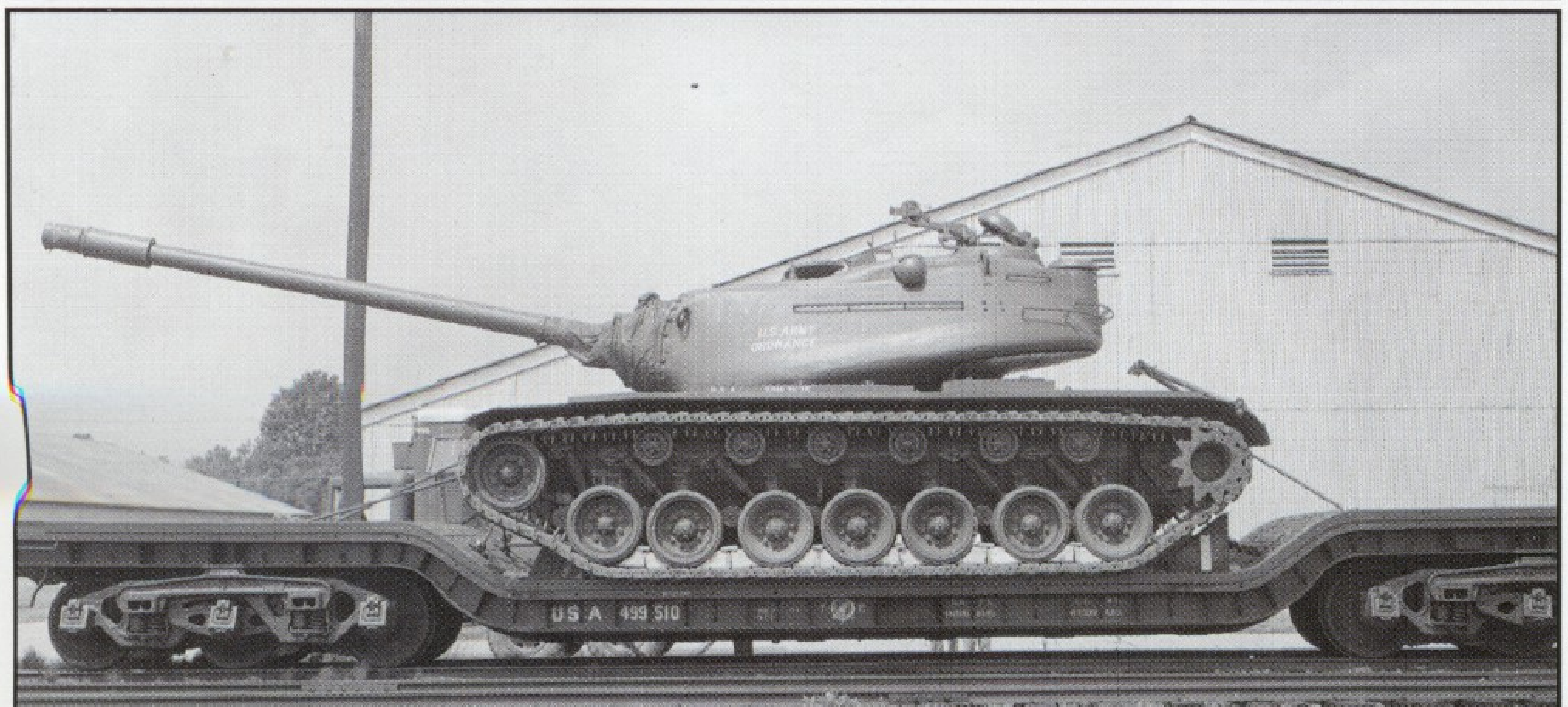
The M103 Heavy Tank Family



The top of the turret was relatively clean on the pilot vehicles. The unusual commander's cupola is evident in this view.



This shot of pilot number 1 gives us a good view of the engine deck as found on the gasoline-powered tanks.

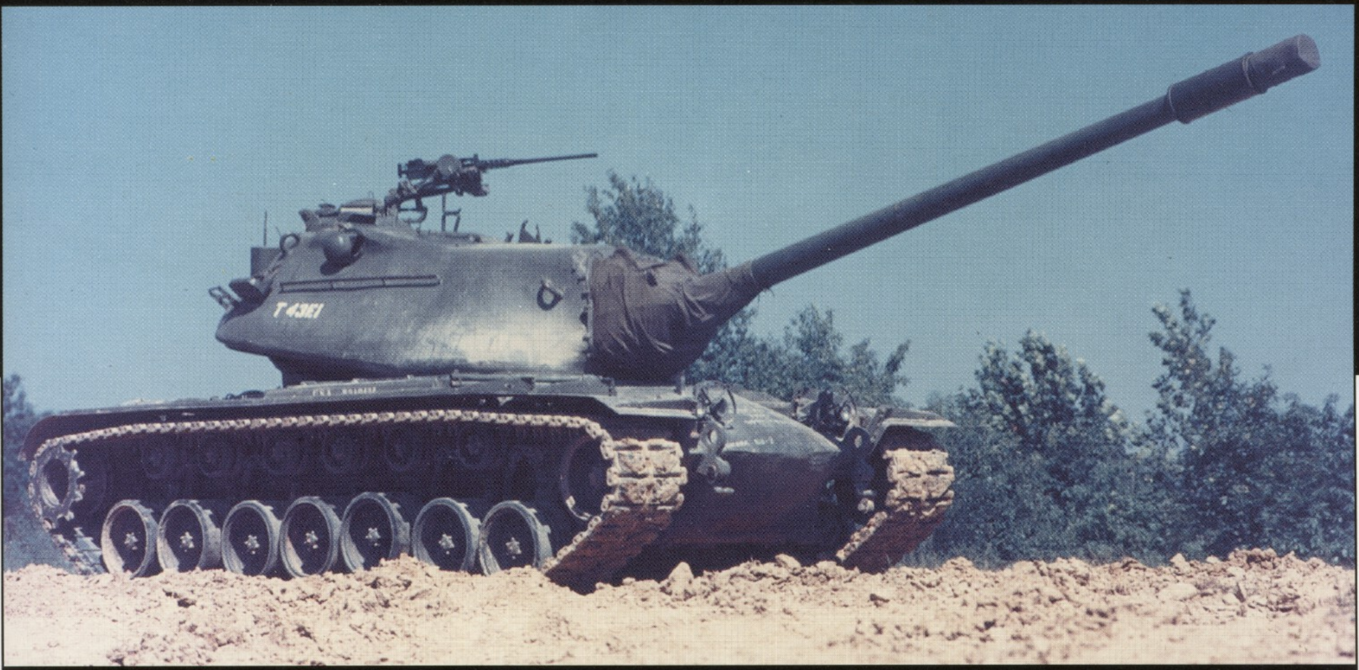


The third pilot T43 did not have the sand shields that were found on the first pilot.

The 80 T43E1 tanks which had already been produced were placed in storage as work began to correct these problems.

Almost 100 changes were ultimately approved, and 74 of the 80 vehicles in storage were so modified. These modified vehicles were standardized as M103 in April 1956. As standardized, the M103 was armed with a M58 (T123E1) 120mm gun, flanked with a .30 caliber coaxial machine gun on either side. The commander's cupola was equipped with a remote control .50 caliber machine gun. This mount allowed the machine gun to be fired from inside the buttoned up tank.

Still not satisfied with the heavy tank, work continued to improve the series. Two pilots of an improved vehicle, designated T43E2 were tested in 1956. A turret basket was added (previously the two loaders had to walk around the floor of the tank as the turret traversed) and the gunner's position relocated. Originally the gunner's position had been in a depression in the floor of the turret bustle. During the redesign the gunner was relocated to a more traditional position to the right of the main gun. The shape of the turret was slightly different due to the welded-in additions and modifications necessary to accommodate



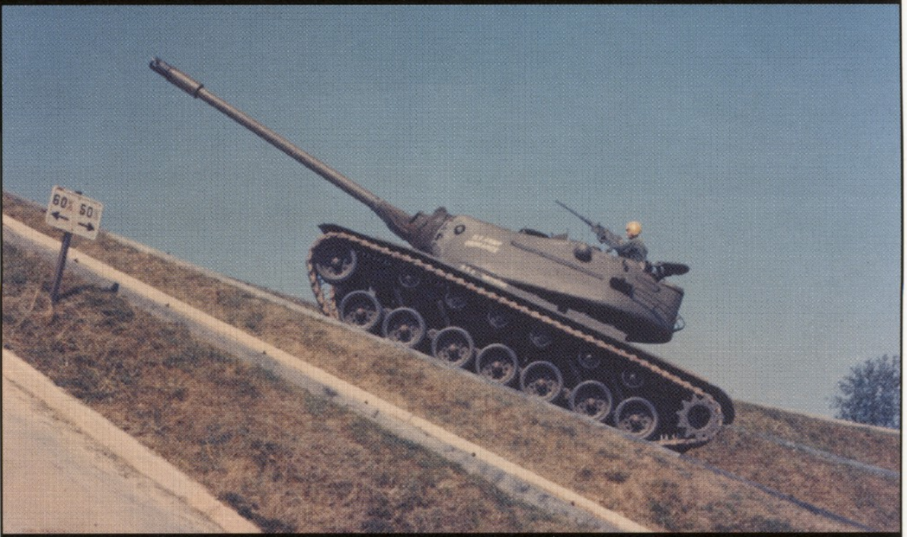
The T43E1 was photographed while undergoing testing by Army Field Forces Board 2 at Ft. Knox in August 1955. Note it lacks the ladder that was welded to the side of the T43.

these changes. Incidental to this was the replacement of the right side coaxial machine gun with an optical sight.

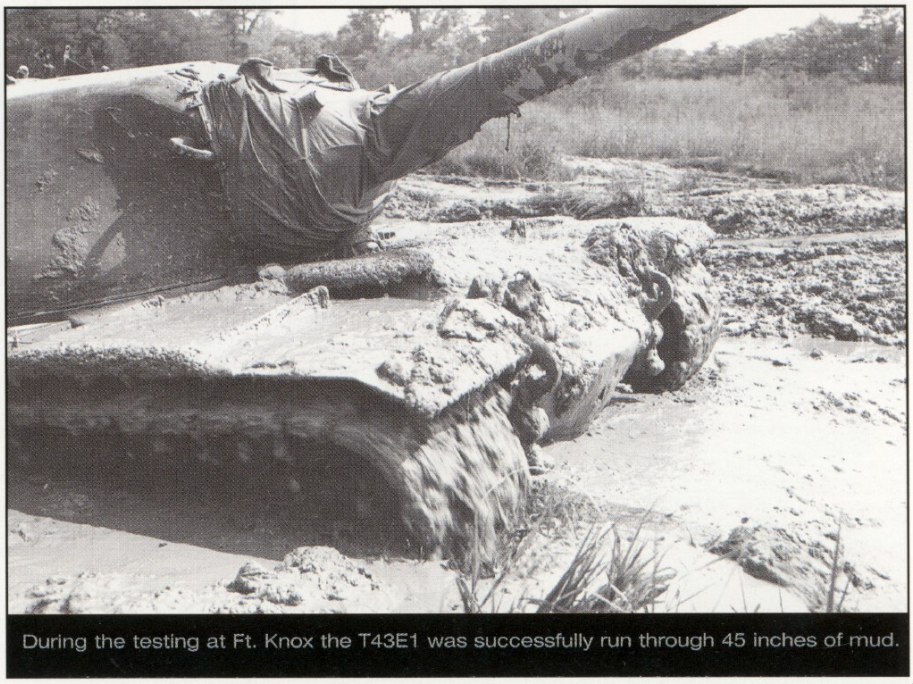
At the same time the commander was provided with a new stereoscopic range finder which was linked to a T33 ballistic computer. The commander's .50 caliber machine gun lost its remote control feature at this time.

After these changes were made the vehicle now fully satisfied the CONARC requirements. However, by this time the Korean crisis had passed and the Army had largely lost interest in the project. The US Marine Corps however proceeded to convert 219 of their T43E1 tanks to the new standard, then designated M103A1. This conversion work was completed by August 1959.

Interestingly, though the Army did not see fit to upgrade their tanks, they did borrow 72 of the updated tanks from the Marine Corps beginning in February 1959. These tanks were deployed by the Army in Europe until 1962. The Marine Corps distributed their remaining tanks on the basis of one heavy tank company per tank battalion beginning 1958-1959.

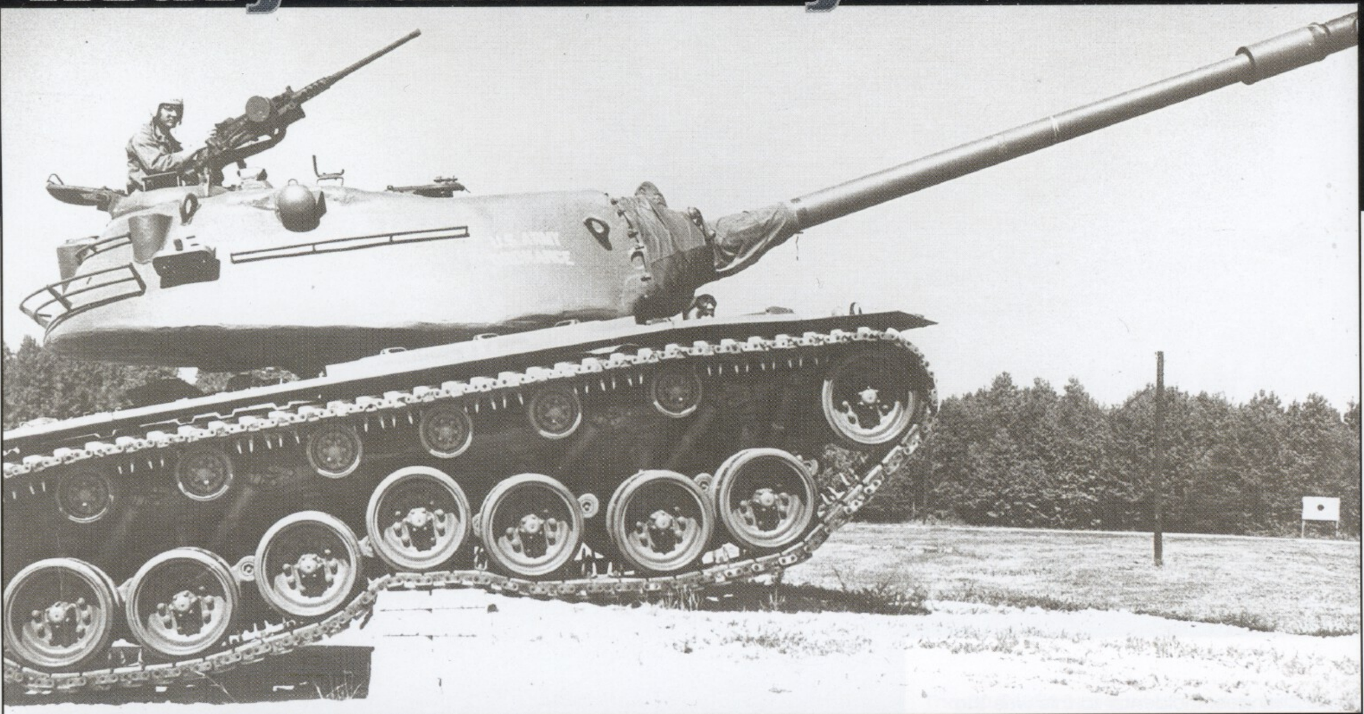


Though grossly underpowered, the heavy tank had no difficulty surmounting the 40 degree slope on Aberdeen's Munson test course on 10 September 1953.

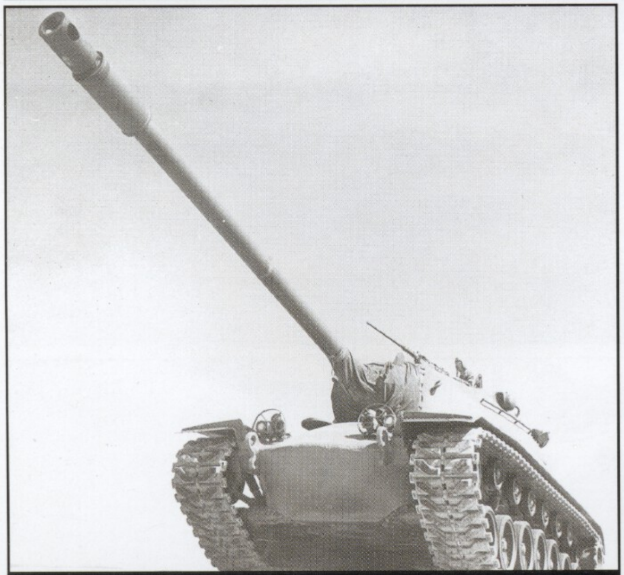


During the testing at Ft. Knox the T43E1 was successfully run through 45 inches of mud.

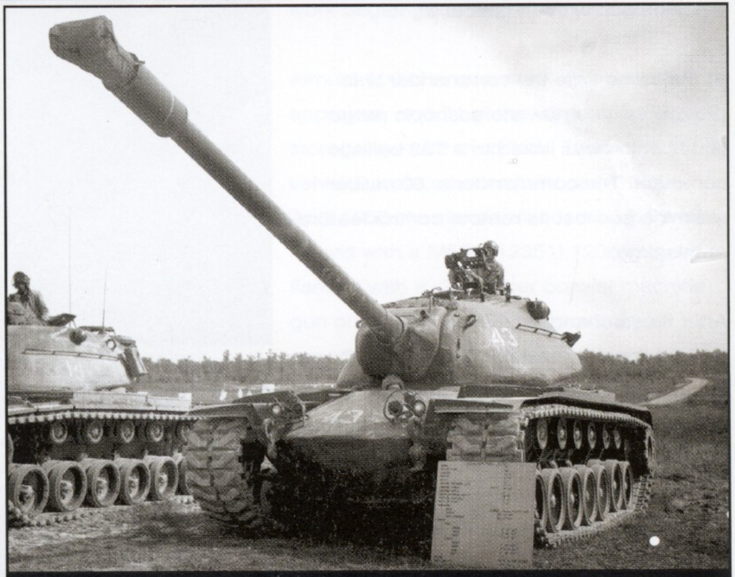
The M103
Heavy Tank Family



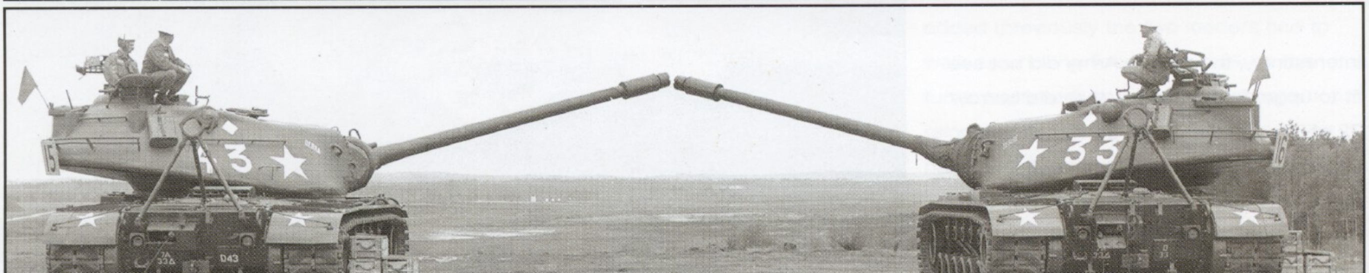
The heavy tank had torsion bar suspension similar to that of the M46/M48 medium tanks.



A cylindrical counterweight was installed on the muzzle just forward of the evacuator chamber.found on the first pilot.

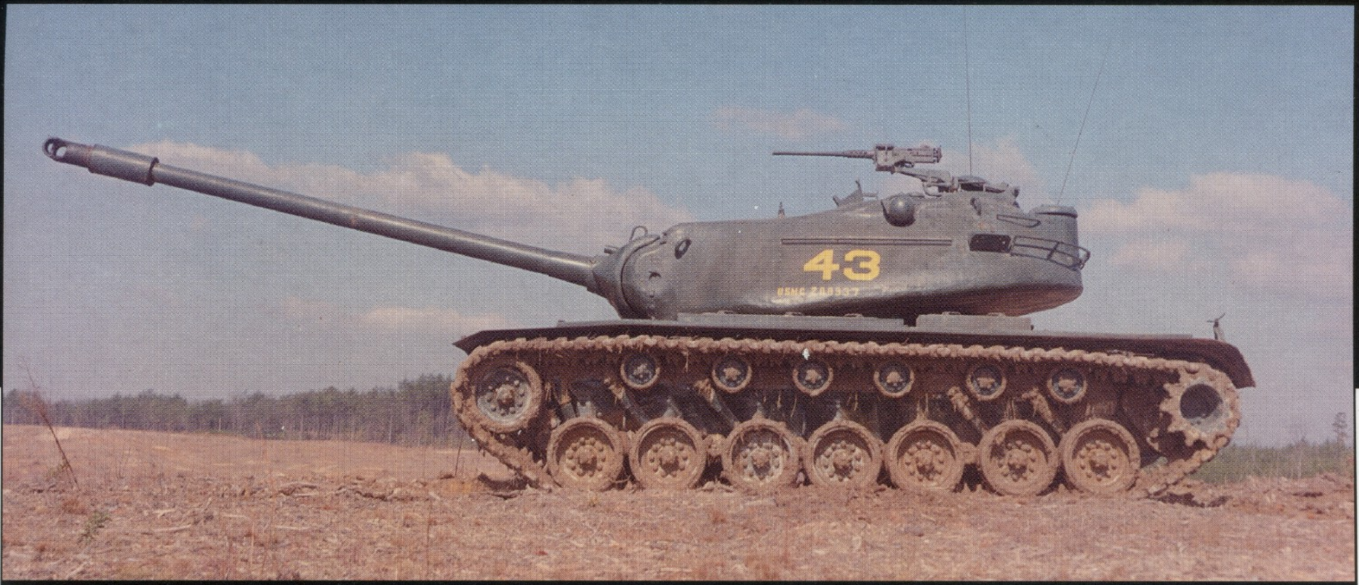


The Marines tried T-shaped muzzle brakes on some of their T43E1s at Quantico, VA in 1954.



Once standardized as the M103 was deployed by the army to Europe to form part of the first line of defense against the Soviet threat.

These two tanks were assigned to the 33rd Armored division and are were photographed at the firing range in Bergen-Hohne, Germany in May of 1959.



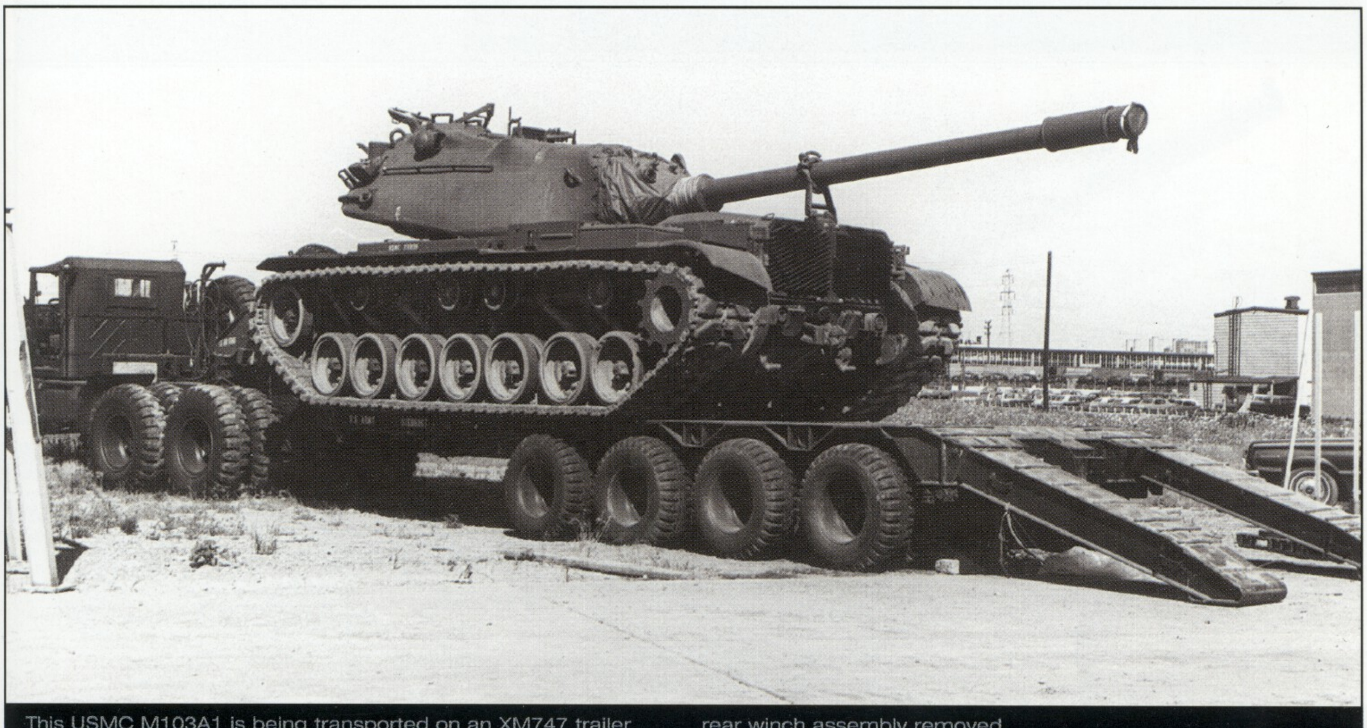
The M103A1 was an extensively revised vehicle. A turret basket was added, and the gunner relocated. This vehicle was photographed at Quantico in 1959.

Up to this point all the tanks in this series; T43, M103 and M103A1 were powered by a Continental AV-1790-5C; 12 cylinder, 4 cycle, 90° vee gasoline engine developing 810 horsepower. This was essentially the same engine used in the much smaller M47 medium tank, resulting in the massive M103 being grossly underpowered. The two series even shared the same transmission, the crossdrive CD-850-4. Virtually all the updates so far had been concentrated in the turret, but this was about to change.

The M103A1E1 program, begun in June 1961, explored the installation of the diesel power pack from the M60 program in the heavy tank. Three pilots were converted. The power pack that was installed consisted of the AVDS-1790-2A diesel engine and CD-850-6 transmission. This was a more compact power pack than the original, and allowed larger fuel tanks to be installed in the engine compartment. Further, the new engine was more fuel-efficient. The increased mileage and fuel capacity worked in concert to increase the tanks range to approximately 300 miles from the 80 which was previously the limit.

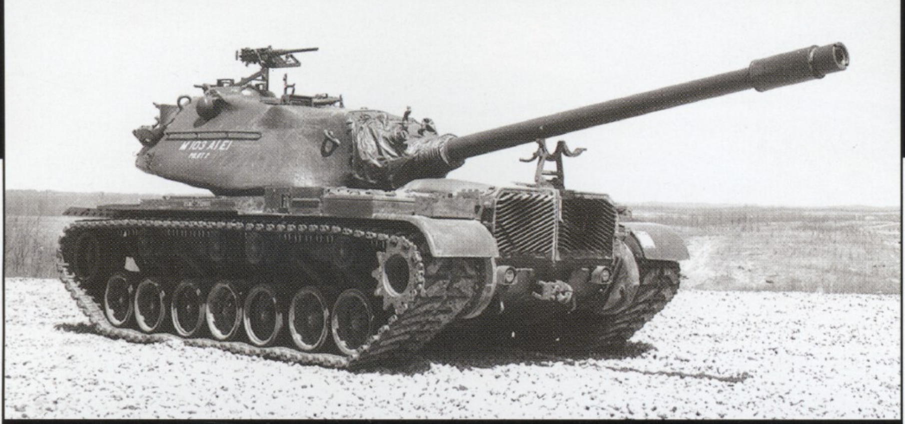
The change in engine and transmission resulted in a reshaped rear engine deck that now resembled that of the diesel powered M48A3 and M60 including insulated infrared suppression.

At the same time metric rangefinders were installed as well as an improved ballistic computer. A xenon searchlight was installed for night fighting. In an effort to



This USMC M103A1 is being transported on an XM747 trailer, which was towed by a M123 tractor variant which has had the rear winch assembly removed.

The M103
Heavy Tank Family



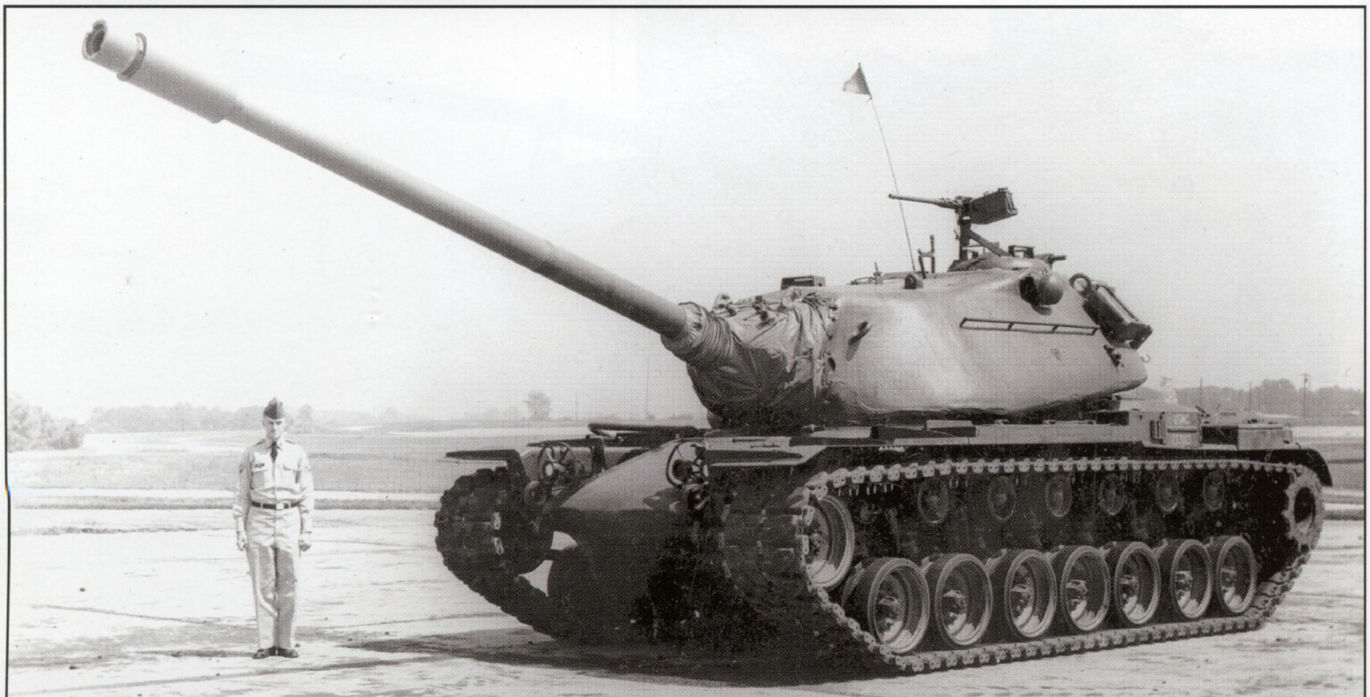
The M103A1E1 was a test installation of the diesel powerpack from the M60 series medium tanks. The test vehicles also had their 2nd and 5th return rollers removed in an effort to reduce weight.

The diesel engine installation included the infrared suppression features of the M60.

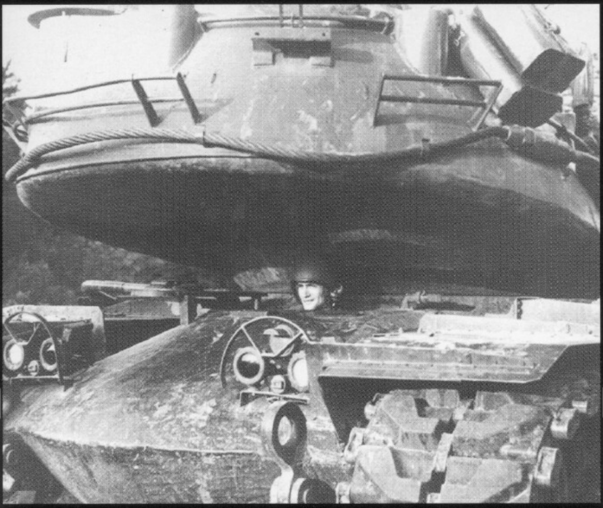
reduce weight, the second and fifth return rollers were eliminated, but this modification was not implemented beyond the pilot models.

In August 1962 the improved tank was reviewed by the Corps and found acceptable. Funding was authorized to convert 153 of the M103A1s into the new configuration. The new classification was M103A2 and the work was preformed under contract by the Red River Army Depot at a rate of 25 per month beginning in August, 1963. A further 52 M103A1 tanks were upgraded during fiscal year 1968 to M103A2 standards.

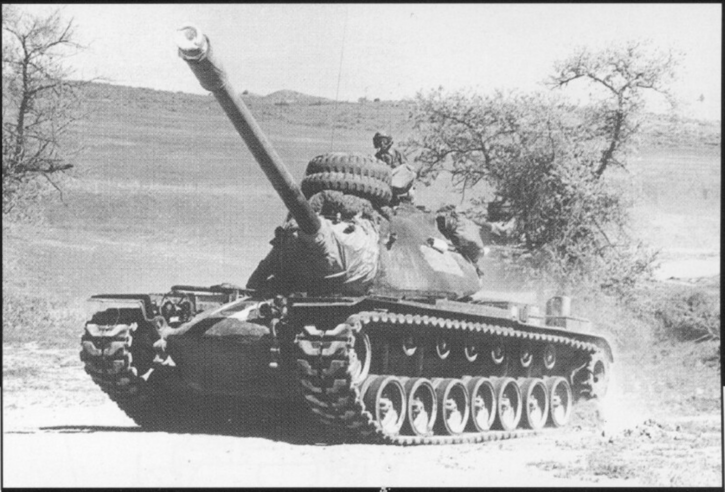
The Marine Corps continued to field the M103A2 through 1973, at which time the heavy tanks were withdrawn from service in favor of the M60 family of medium tanks.



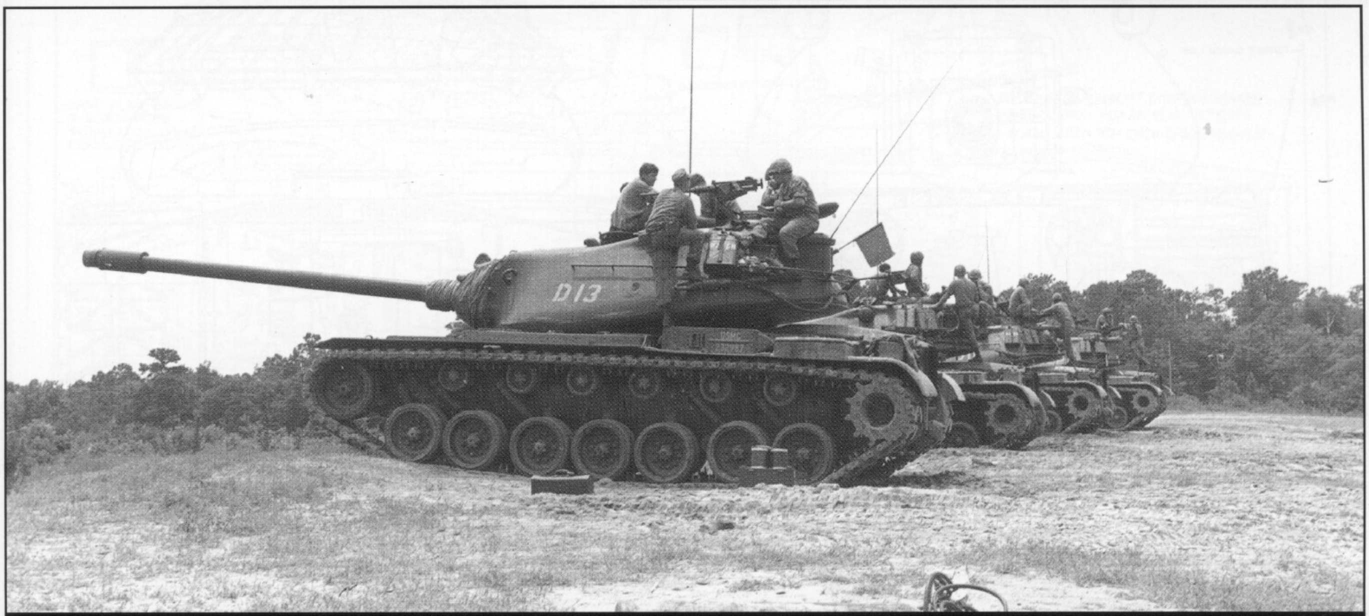
The immense size of the heavy tank is obvious when a man is nearby for comparison.



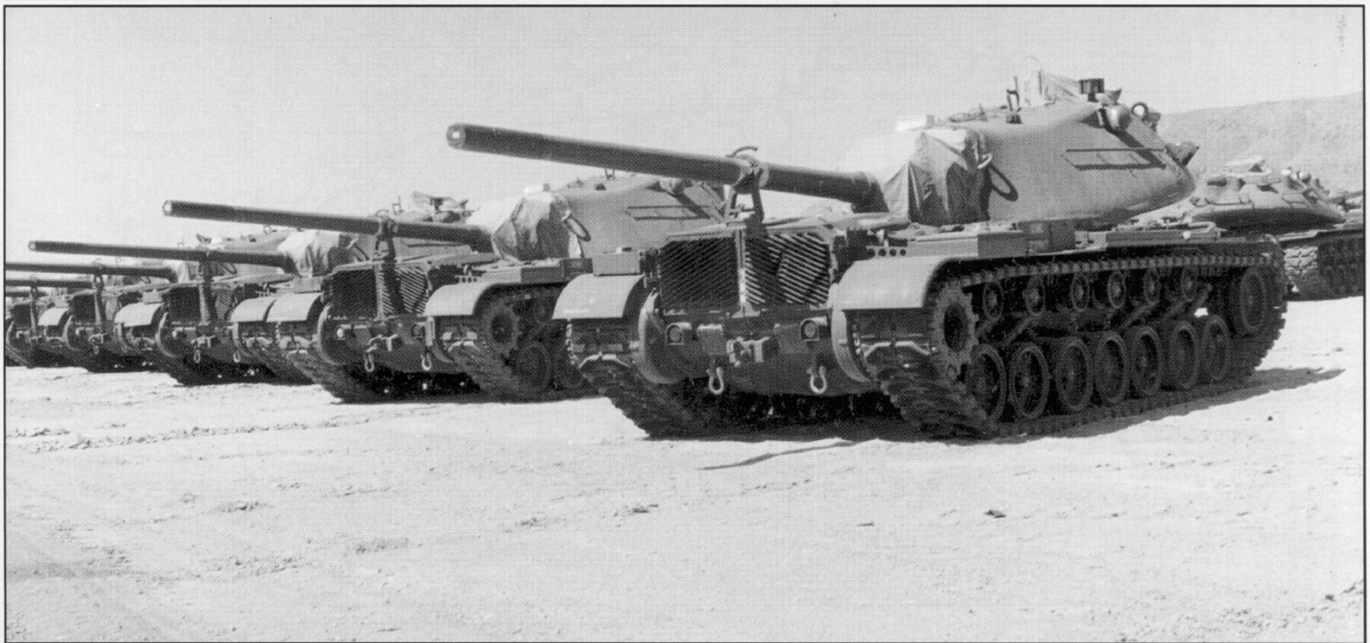
The considerable overhang of the turret is a quick distinguishing characteristic of the heavy tanks.



The Marine Corps relied on the M103A2 for heavy support for many years. This vehicle was photographed during maneuvers at Camp Pendleton in March 1965.



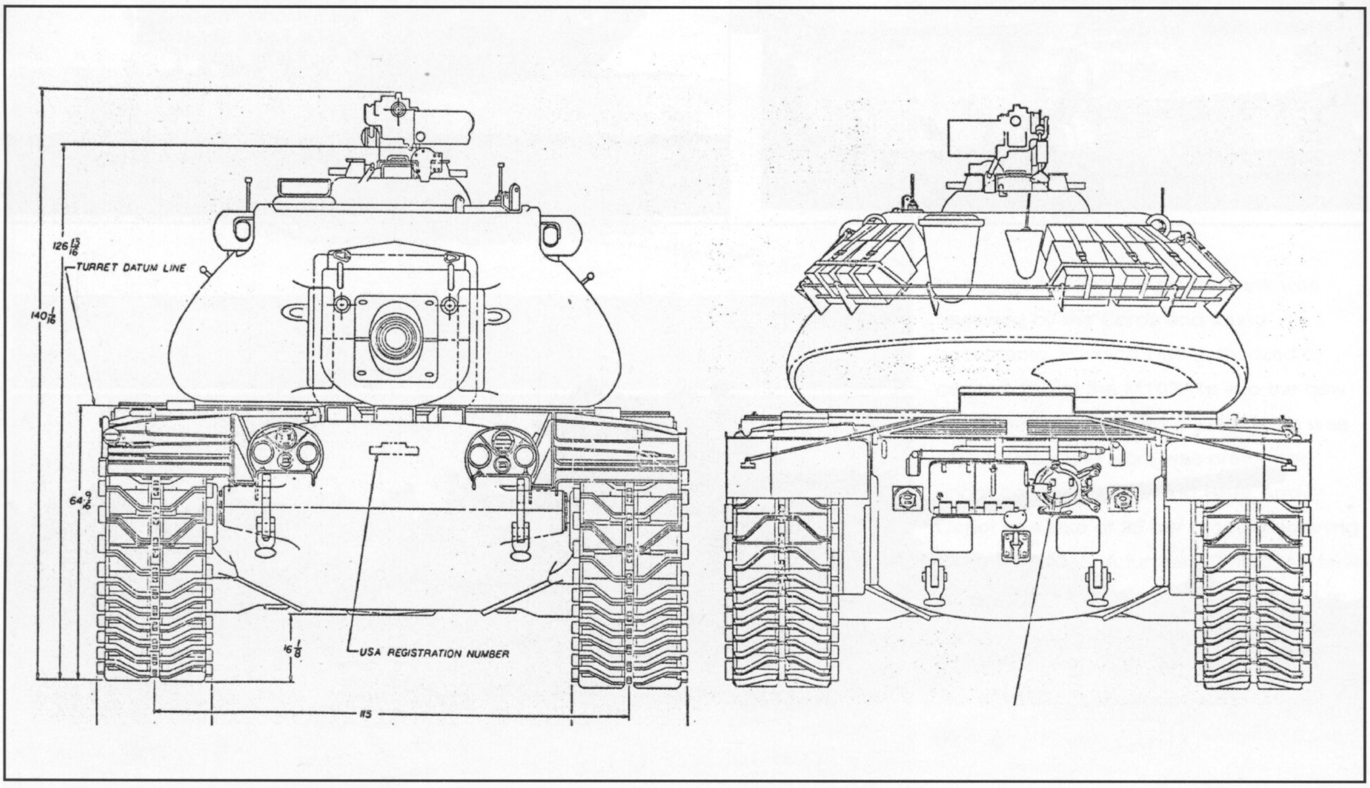
The heavy armor and long-range, powerful cannon of the M103 family was never tested in combat, but the Marines trained constantly for that possibility.



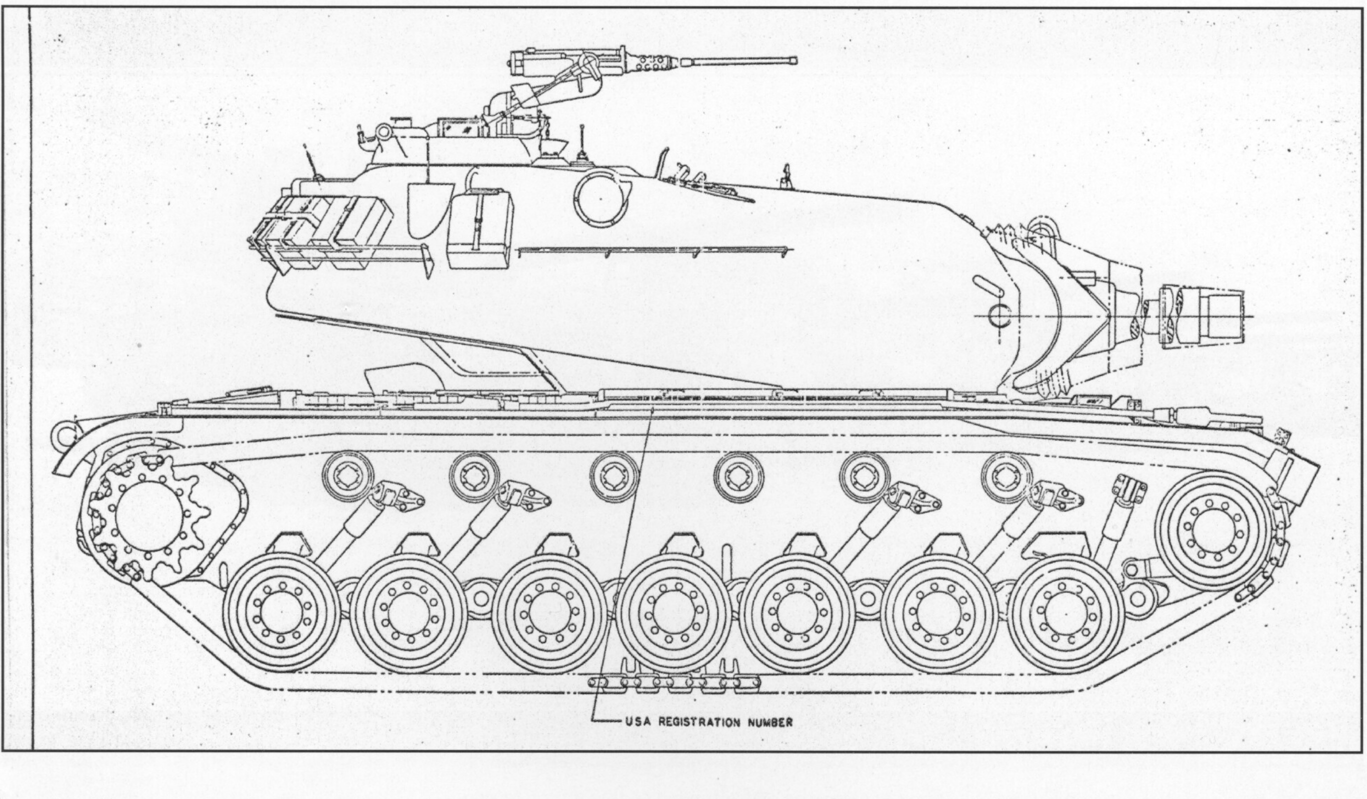
Most of the tanks lived out their lives like these photographed in 1972 in storage at the Marine Corps Supply Center, Barstow.1

Photos courtesy of the US Army, the National Archives and Records Administration and the Patton Museum, Ft. Knox, KY.

The M103
Heavy Tank Family



126 13/16
TURRET DATUM LINE
140 1/16
64 9/16
16 1/8
USA REGISTRATION NUMBER
115



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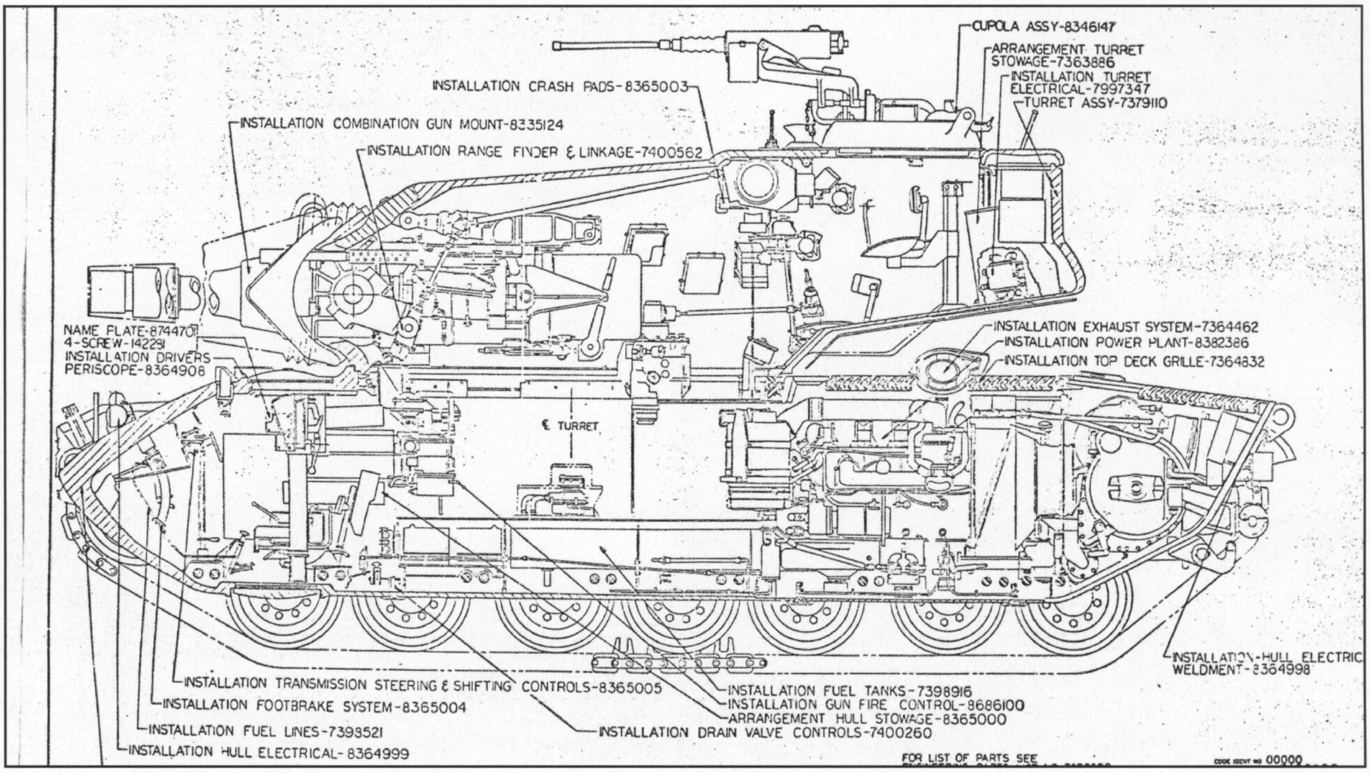
Drawings not reproduced at a constant scale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ARRANGEMENT TURRET STOWAGE-7363886
INSTALLATION TURRET ELECTRICAL-7997347
TURRET ASSY-7379110
INSTALLATION CRASH PADS-8365003
INSTALLATION COMBINATION GUN MOUNT-8335124
INSTALLATION RANGE FINDER & LINKAGE-7400562
NAME PLATE-874470
4-SCREW-142281
INSTALLATION DRIVERS PERISCOPE-8364906
INSTALLATION EXHAUST SYSTEM-7364462
INSTALLATION POWER PLANT-8382386
INSTALLATION TOP DECK GRILLE-7364832
℄ TURRET
INSTALLATION-HULL ELECTRIC WELDMENT-8364998
INSTALLATION TRANSMISSION STEERING & SHIFTING CONTROLS-8365005
INSTALLATION FOOTBRAKE SYSTEM-8365004
INSTALLATION FUEL LINES-7398521
INSTALLATION HULL ELECTRICAL-8364999
INSTALLATION FUEL TANKS-7398916
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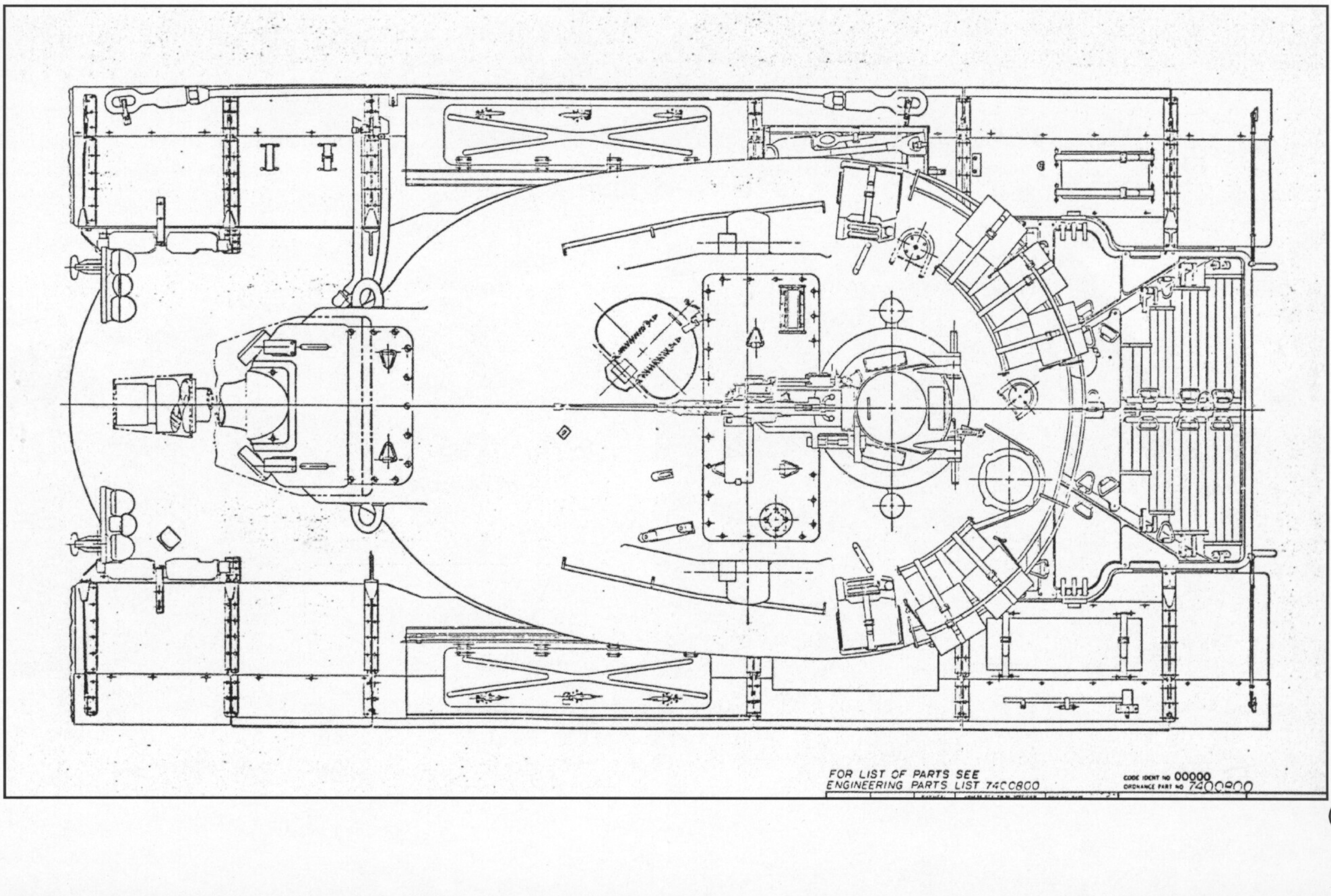
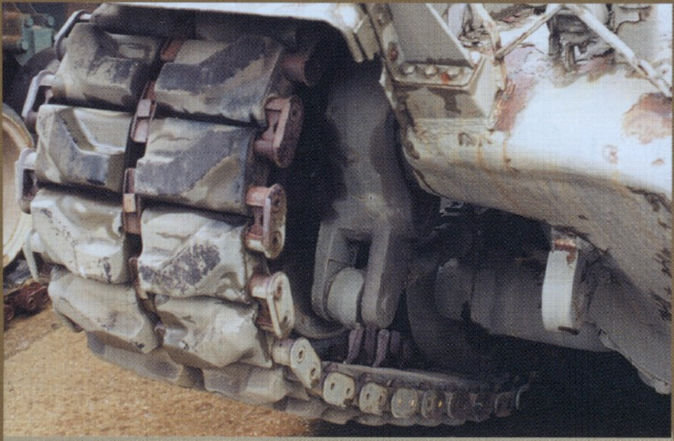
INSTALLATION DRAIN VALVE CONTROLS-7400260
FOR LIST OF PARTS SEE
CODE IDENT NO 00000

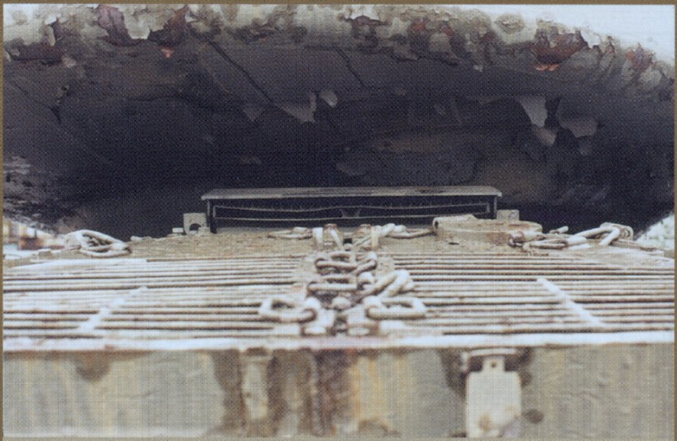

FOR LIST OF PARTS SEE
ENGINEERING PARTS LIST 74CC800
CODE IDENT NO 00000
ORDNANCE PART NO 7400800

Xtreme detail

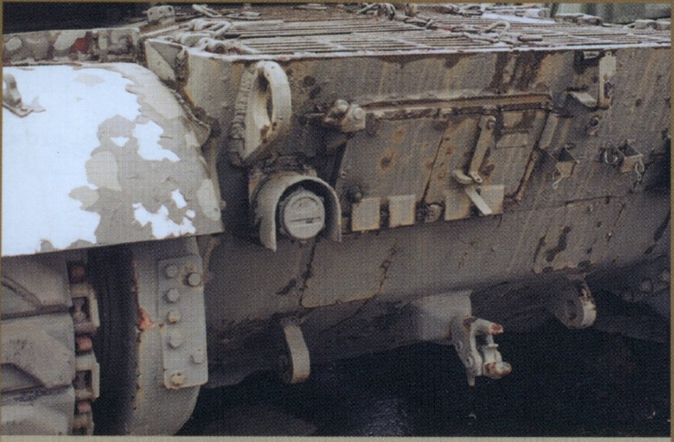
T43 Pilot



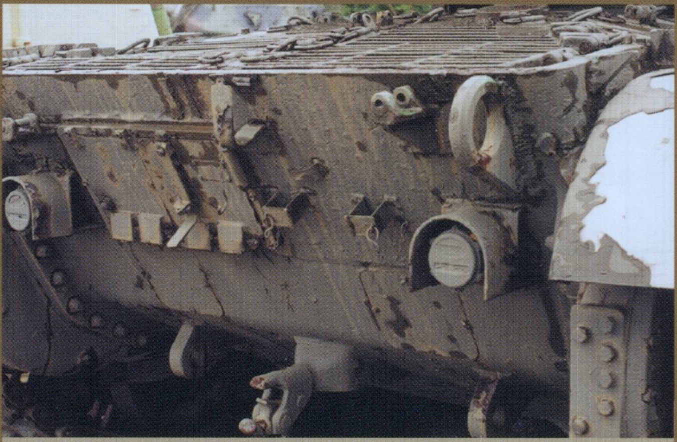
The front tracks and bow of the T43 showing the boat shaped hull.
(Photo David Doyle)



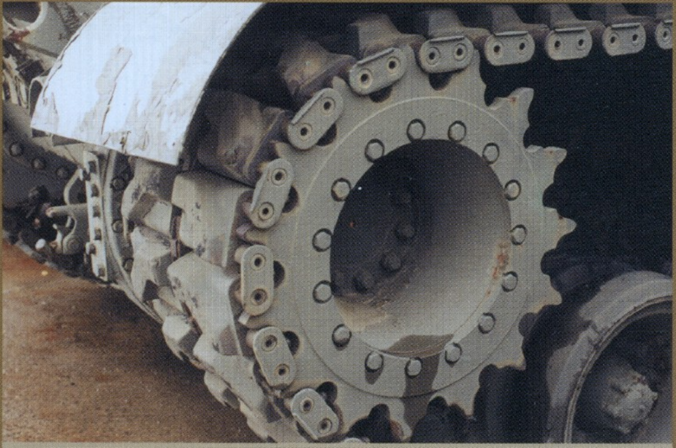
Looking up the engine deck to the exhaust outlet tucket under the turret overhang.
(Photo David Doyle)



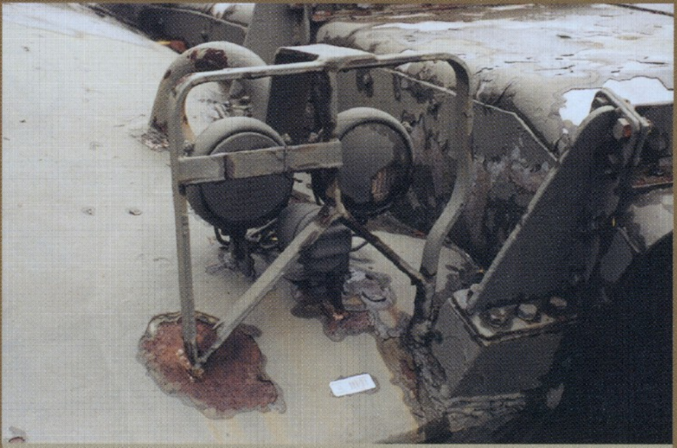
The back of the hull which dwarfs the towing hook mounted centrally.
(Photo David Doyle)



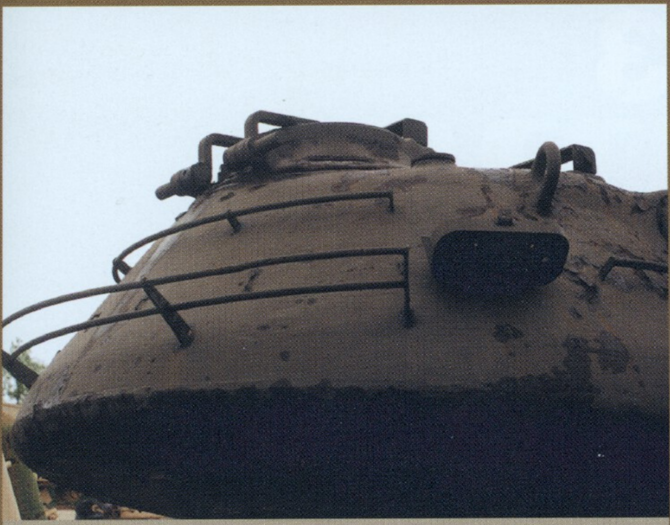
Another view of the hull rear note the massive lifting hooks.
(Photo David Doyle)



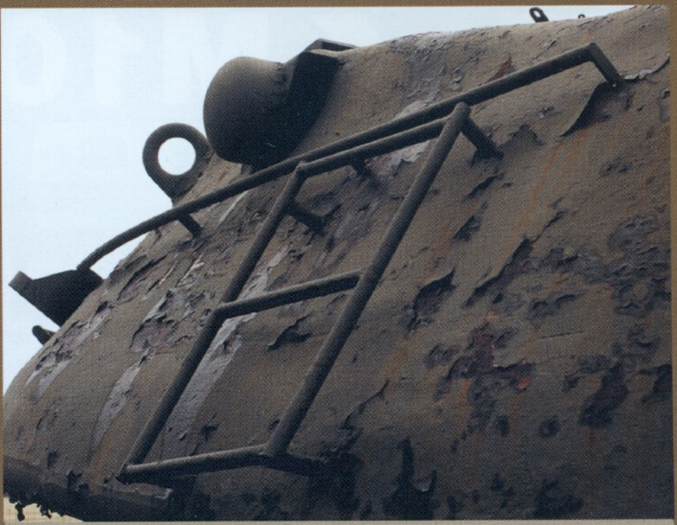
The rear mounted drive sprocket.
(Photo David Doyle)



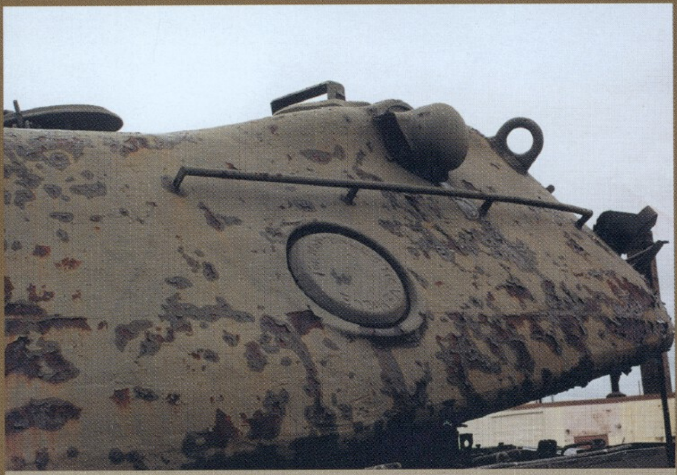
The front headlamp fittings mounted on the bow.
(Photo David Doyle)



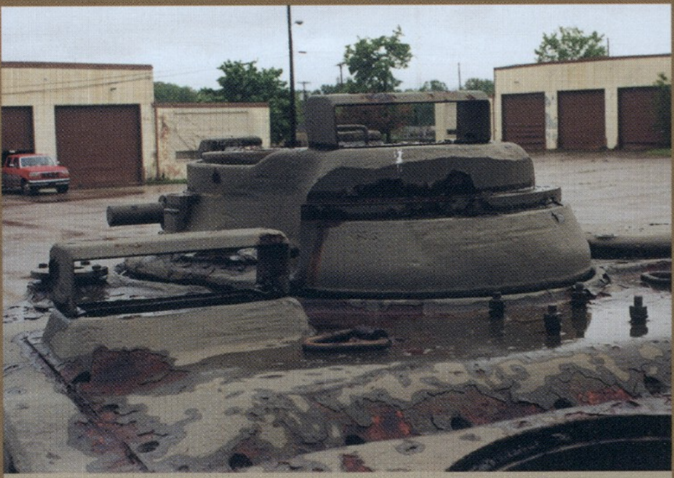
The rear of the big turret with the stowage racks and rails still in position. (Photo David Doyle)



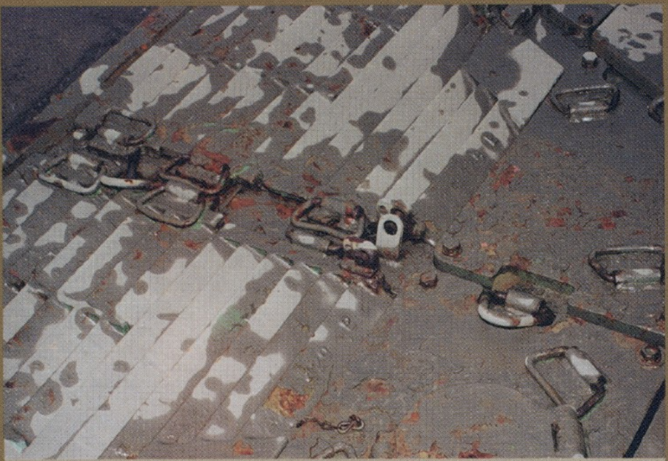
As is the ladder on the turret side - note the protruding rangefinder housing.
(Photo David Doyle)



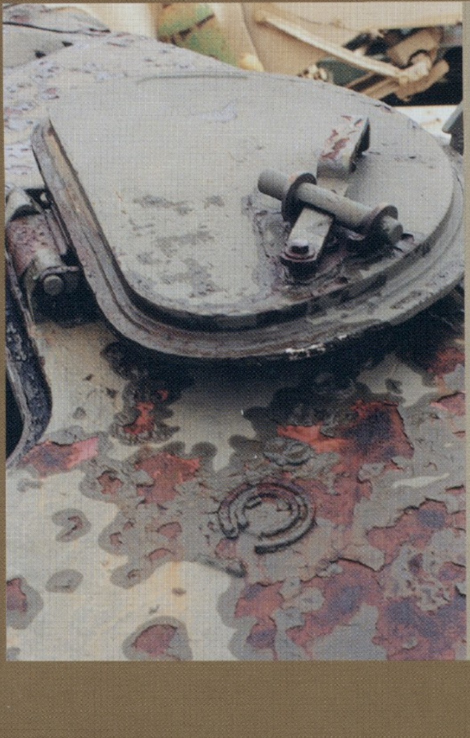
The other side of the turret with the port that was not carried through into production. (Photo David Doyle)



The turret roof and comanders cupola. (Photo David Doyle)



The rear part of the engine deck is covered in grab handles. (Photo David Doyle)

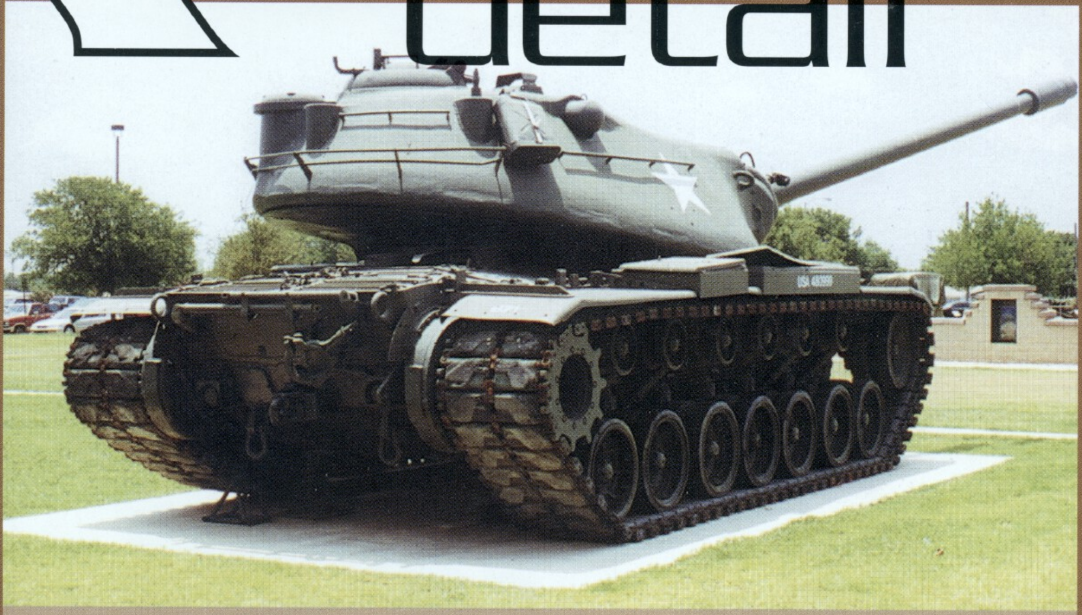


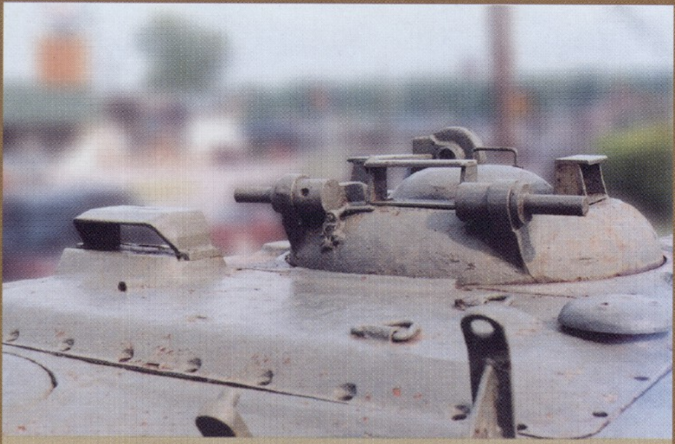
The inside face of the open crew hatch on the turret roof.

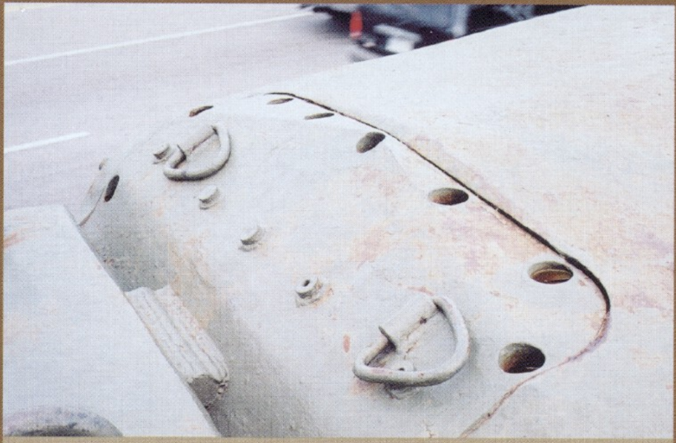
(Photo David Doyle)

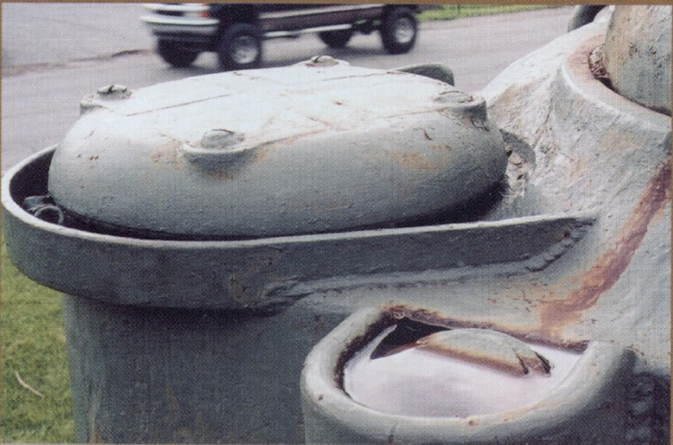
M103

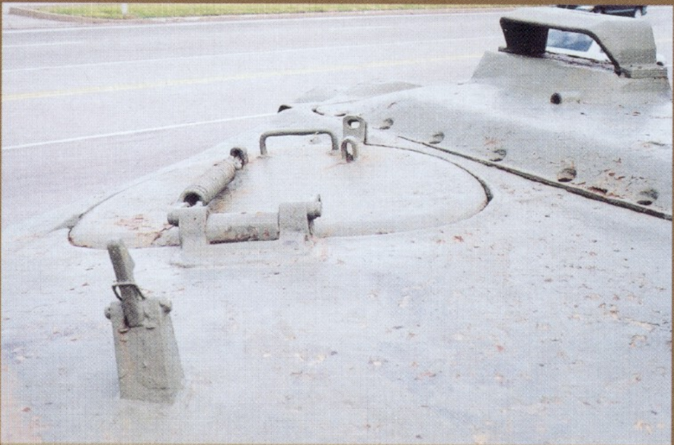
Xtreme detail

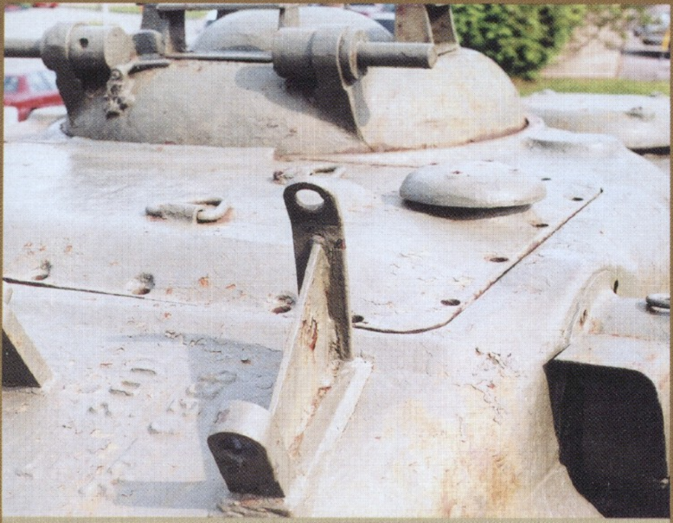

An overall view of the M103 the hull dwarfed by the massive turret
(Photo David Doyle)


The turret roof with commanders cupola and empty periscope guards.
(Photo David Doyle)

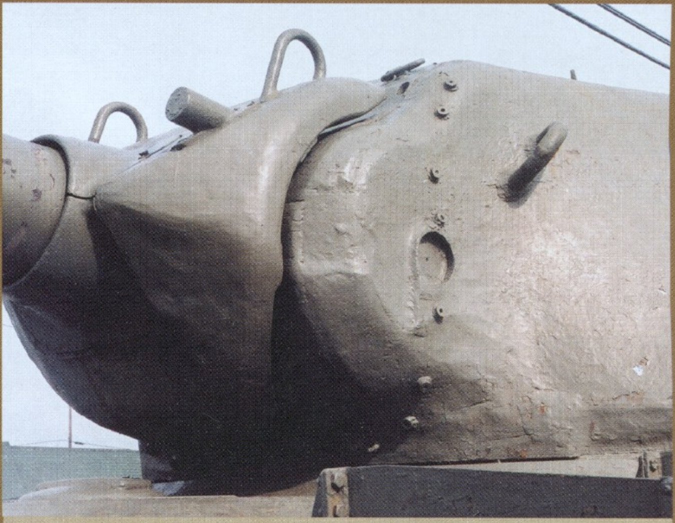

The turret just behind the mantlet with the bump stop just visible. Note the depth of the rebated fixings for the gun housing.
(Photo David Doyle)


The turret ventilator cover.
(Photo David Doyle)

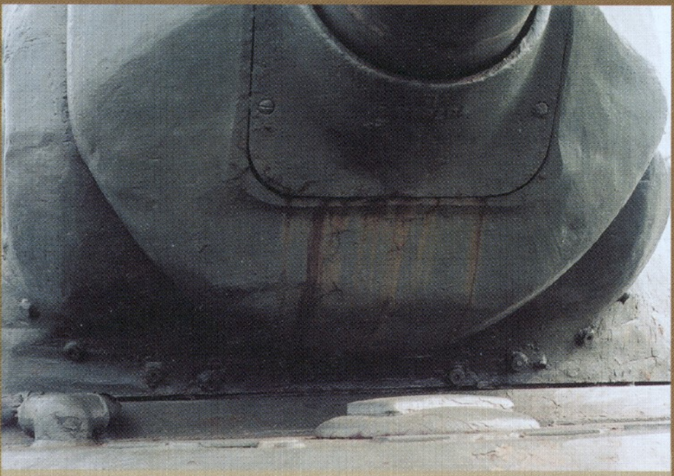

This is the crew hatch situated forward of the commanders cupola with its latch visible at the front of the picture.
(Photo David Doyle)



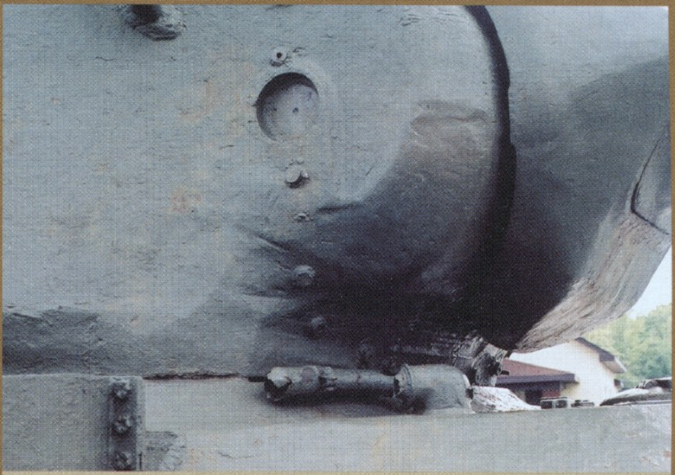
The purpose of the bracket seen here is uncertain, note the casting numbers next to it and the rangefinder housing on the turret side. (Photo David Doyle)



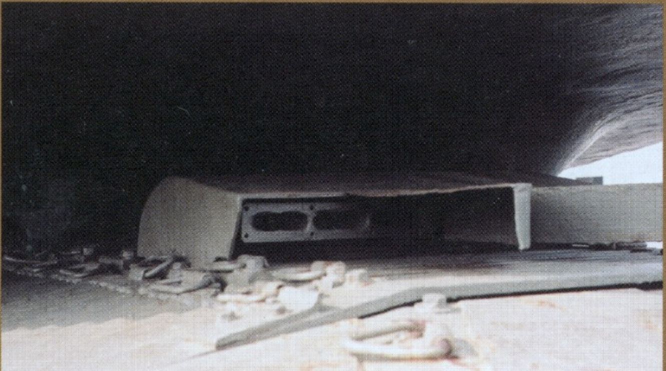
The mantlet with fixing points on the turret for a weatherproof mantlet cover. (Photo David Doyle)



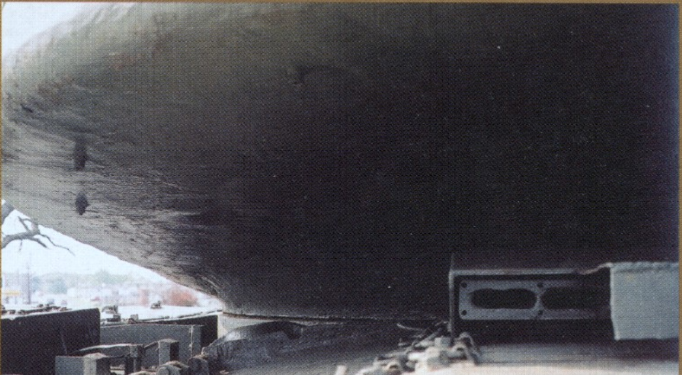
The underside of the mantlet and the drivers periscope cover visible below it. (Photo David Doyle)



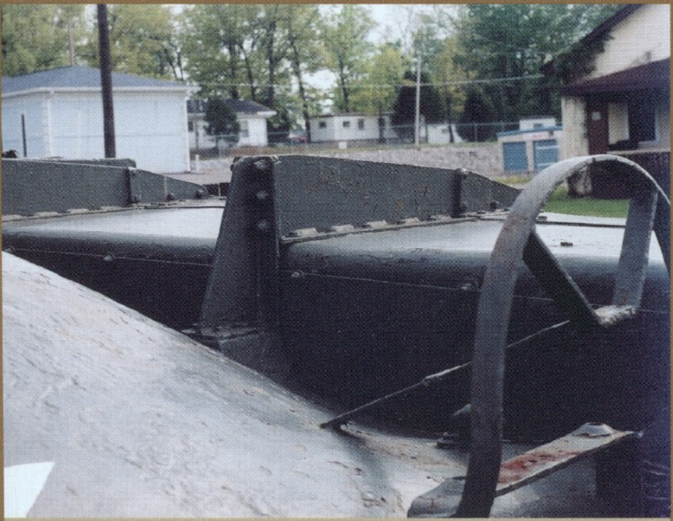
Another view of the mantlet and turret which has quite a smooth finish. (Photo David Doyle)



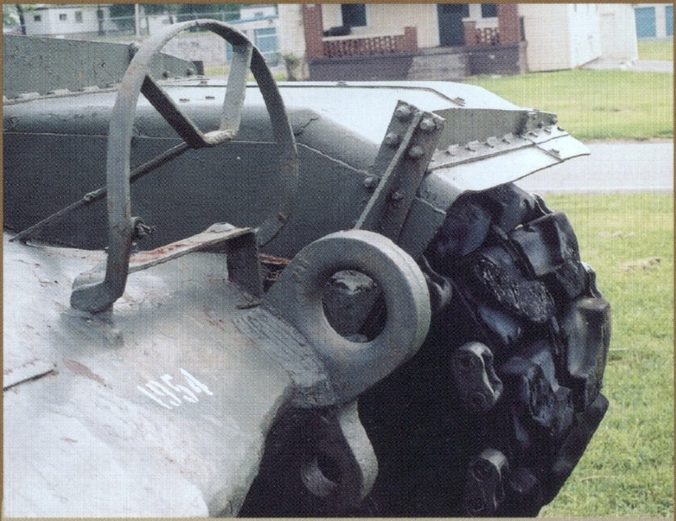
The engine deck overshadowed by the huge turret overhang. (Photo David Doyle)



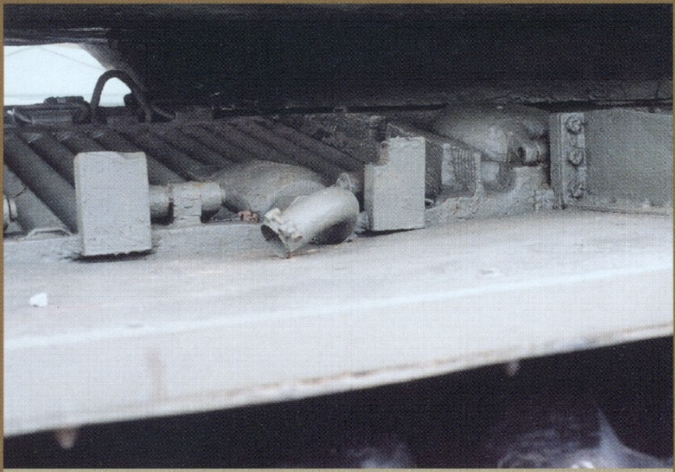
Another view of the engine deck, the raised box in the centre is the exhaust outlet. (Photo David Doyle)



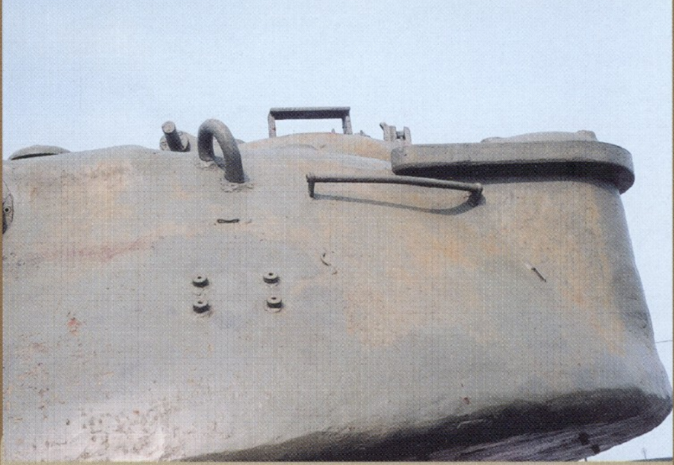
This view shows the bracket supporting the track guard on the bow and the light guard the lights themselves are missing. (Photo David Doyle)



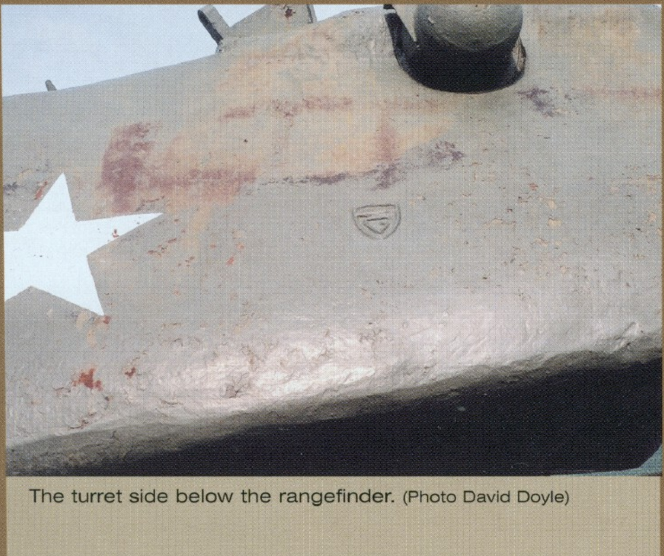
The bow with its massive towing eyes, notice the substantial weld bead fixing them to the hull. (Photo David Doyle)



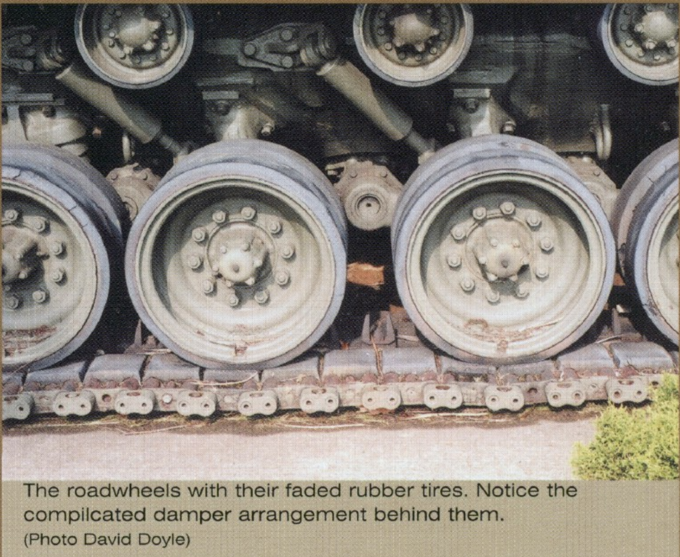
A view of the engine deck covers under the turret - you can just see a fuel filler cap behind the track bracket. (Photo David Doyle)



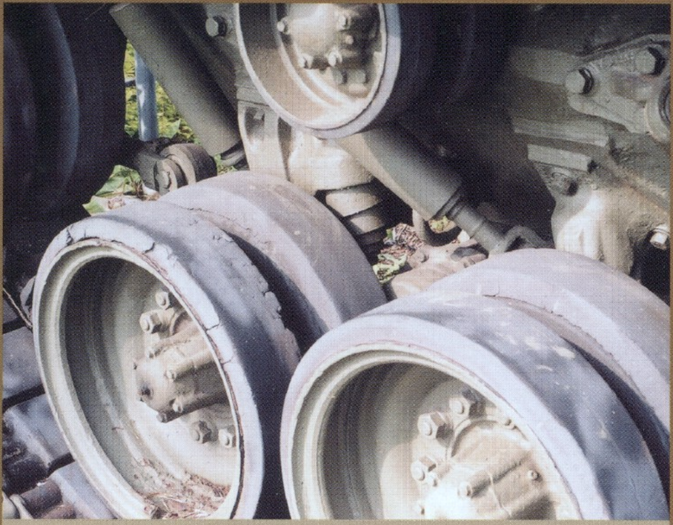
The impressive raised rear of the turret. The four circular fixing points are for a jerry can rack. (Photo David Doyle)



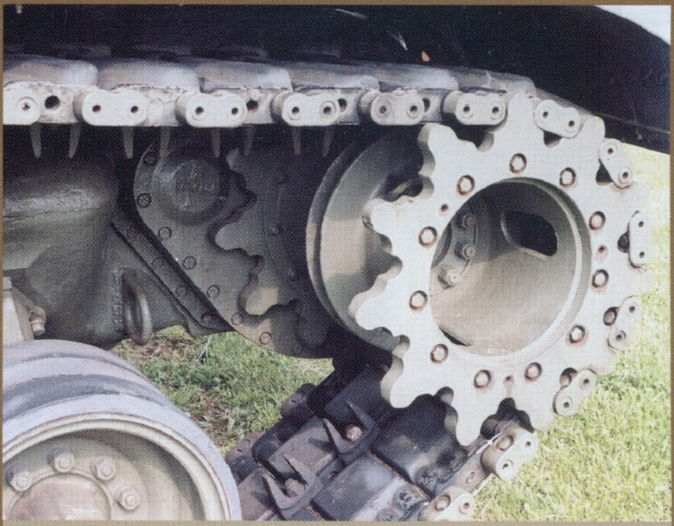
The turret side below the rangefinder. (Photo David Doyle)



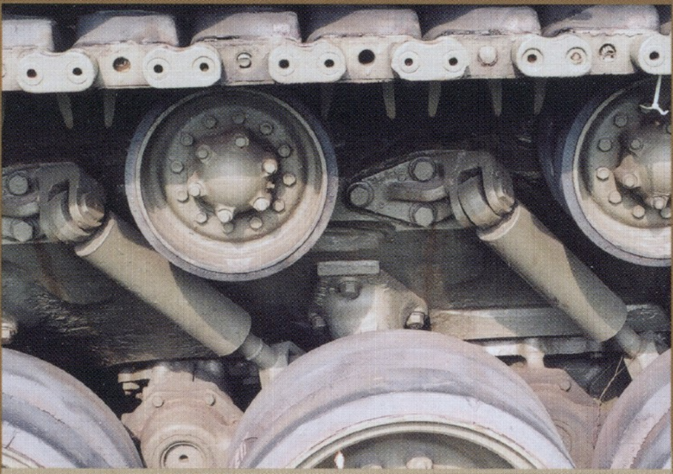
The roadwheels with their faded rubber tires. Notice the compilcated damper arrangement behind them. (Photo David Doyle)



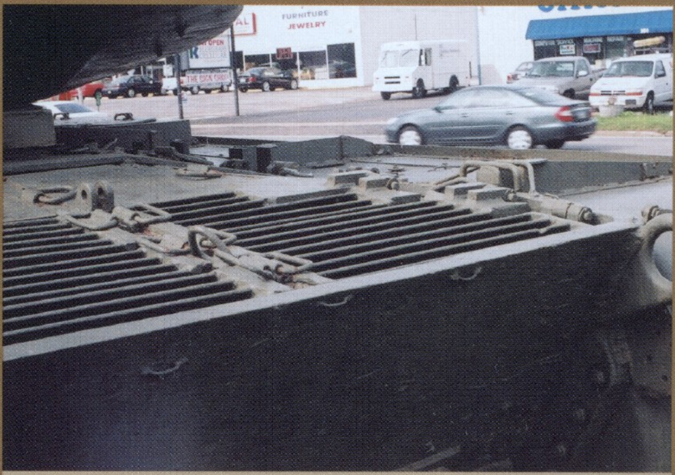
Another view of the wheels and damper arrangement.
(Photo David Doyle)



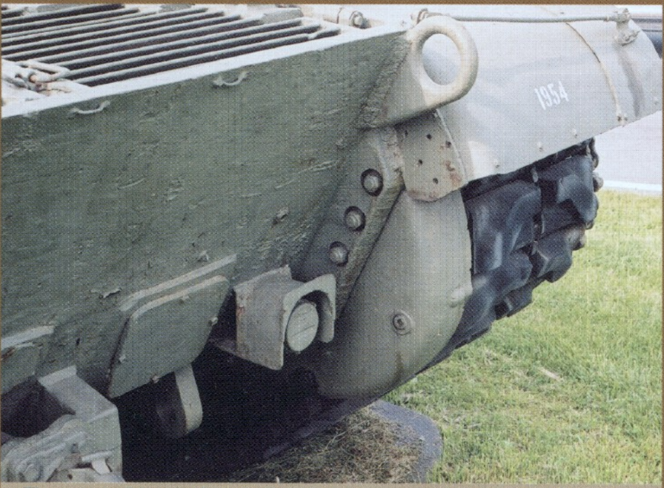
The drive sprocket and detail of the tracks.
(Photo David Doyle)



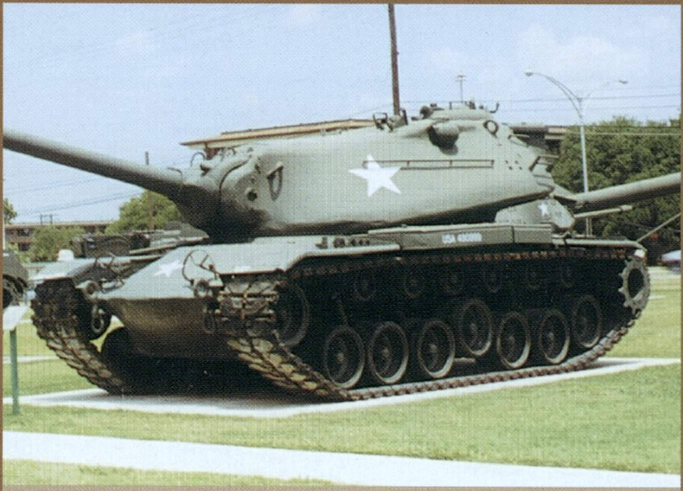
The return rollers.
(Photo David Doyle)



The rear engine deck grills, note the tie down loops on the back of the hull. (Photo David Doyle)



The rear of the hull showing the cover over the final drive and access panels on the rear armour plate.
(Photo David Doyle)

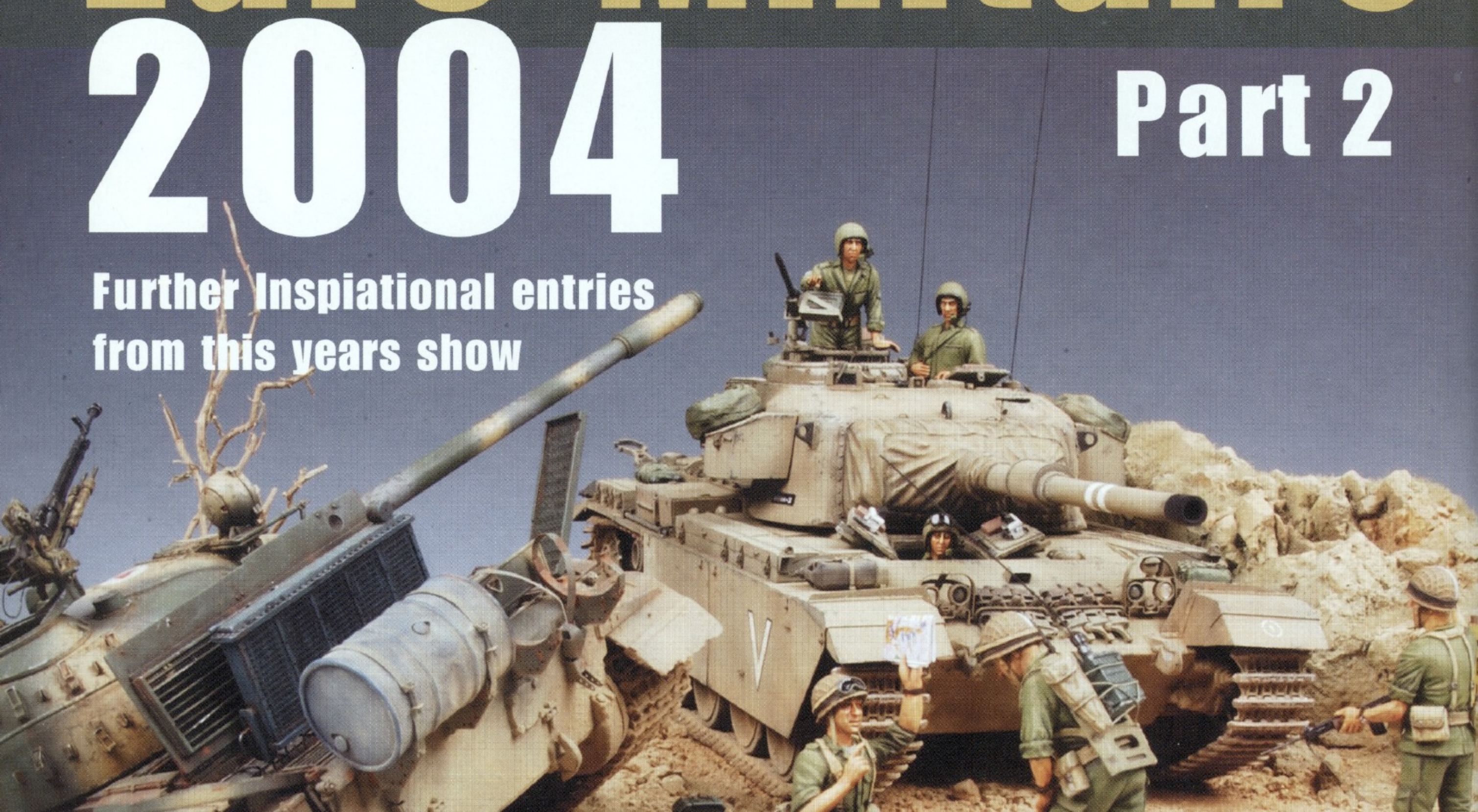


Another overall view with its distinctive top heavy appearance, note the roadwheel jammed in a raised position.
(Photo David Doyle)

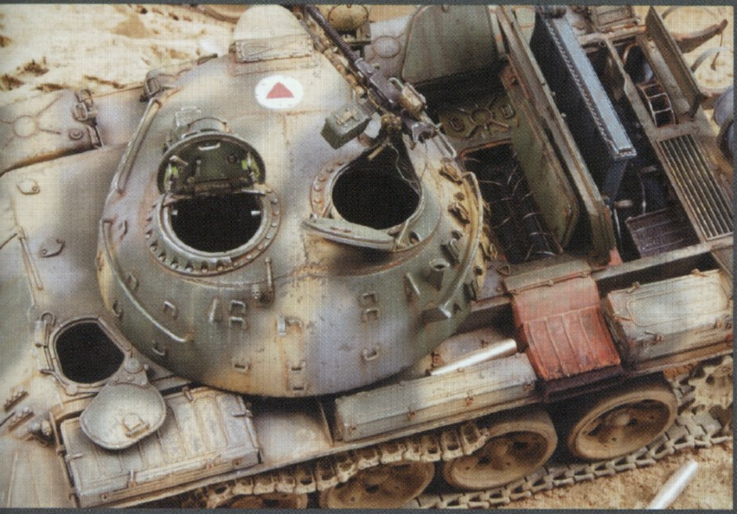
Euro Militaire 2004

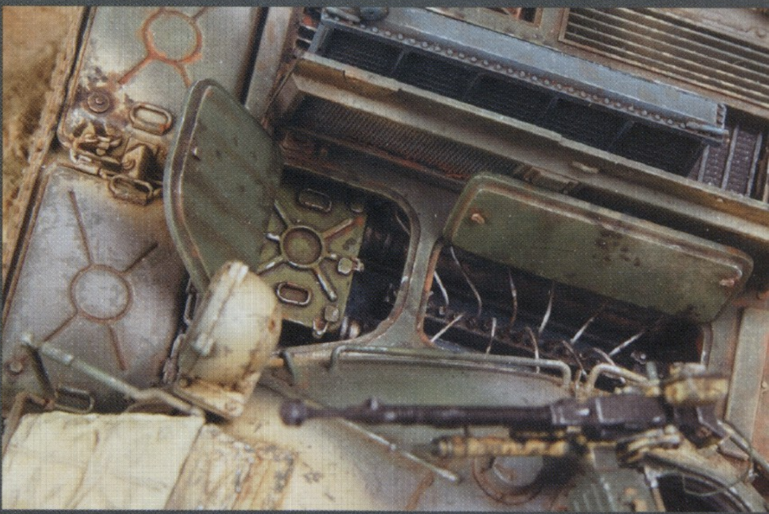
Part 2

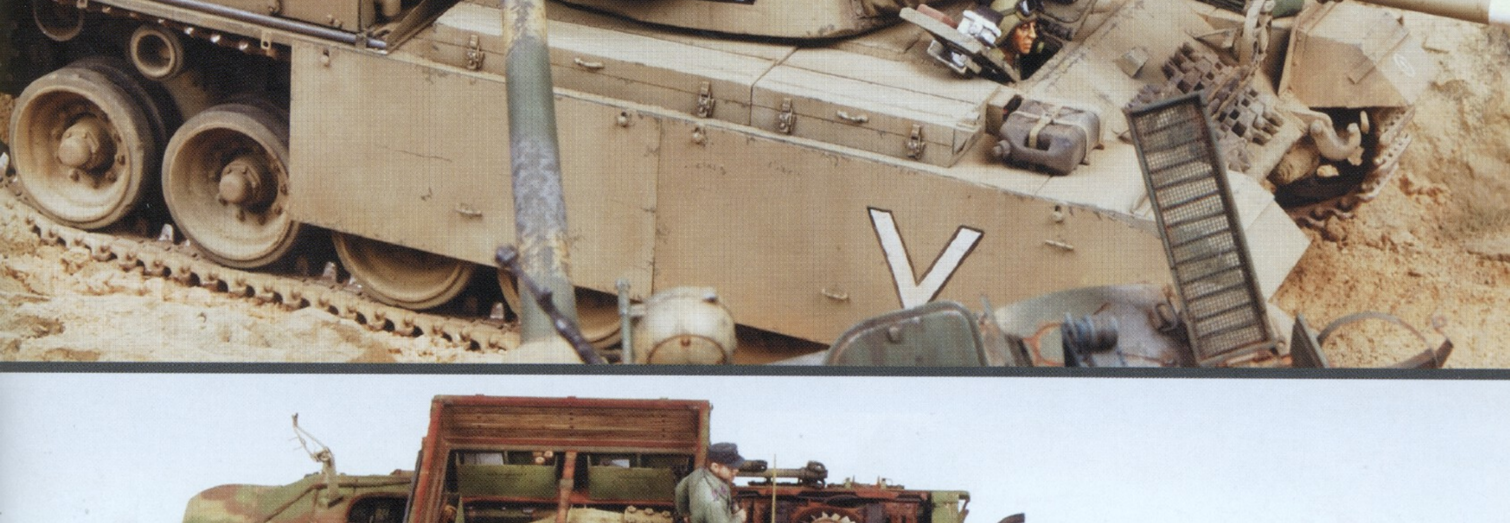
Further Inspiational entries from this years show



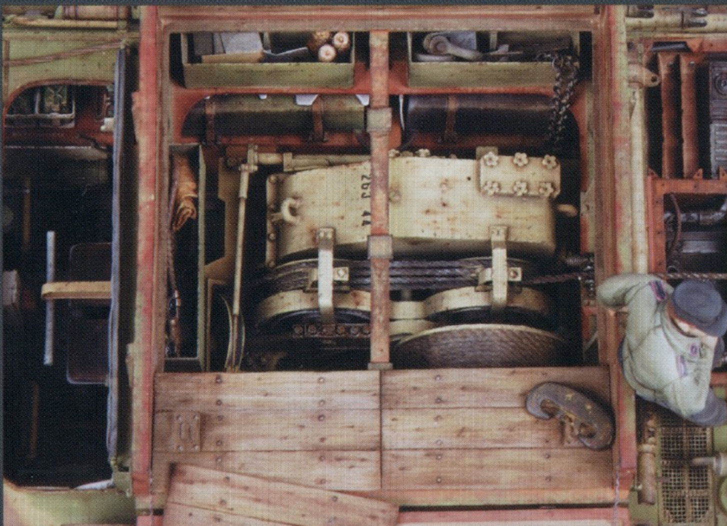
Matt Kirk won a Bronze for ‘Turning the Tide’ - the T55 with fully detailed engine was quite something.



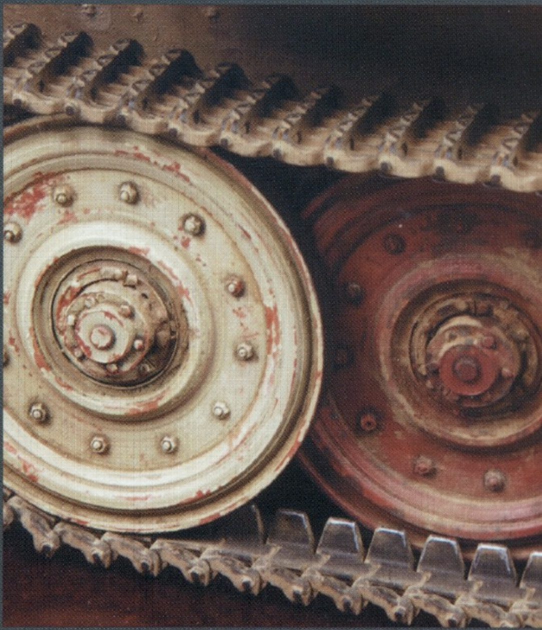


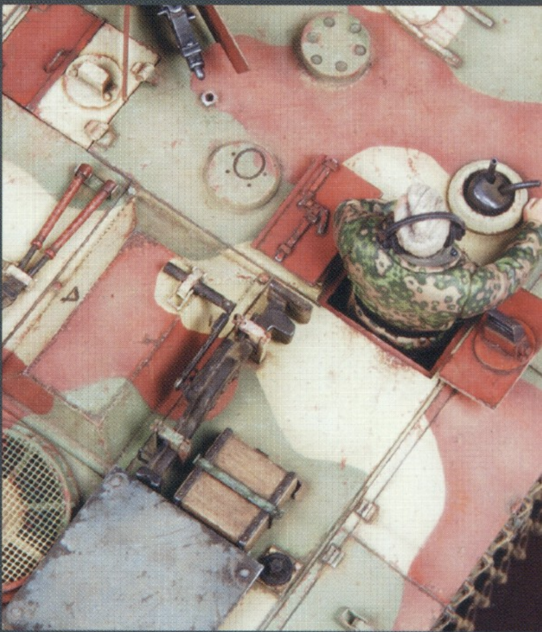


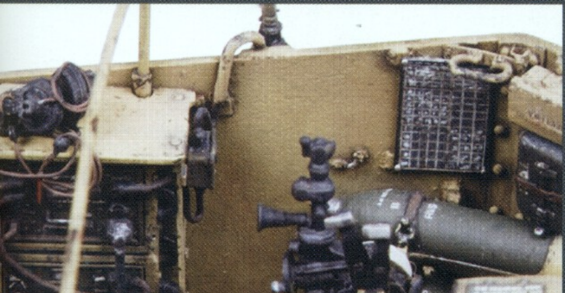
A Gold medal winning Bergpanther by Phil Stutcinskas - note the incredible worn paint finish on the spade.



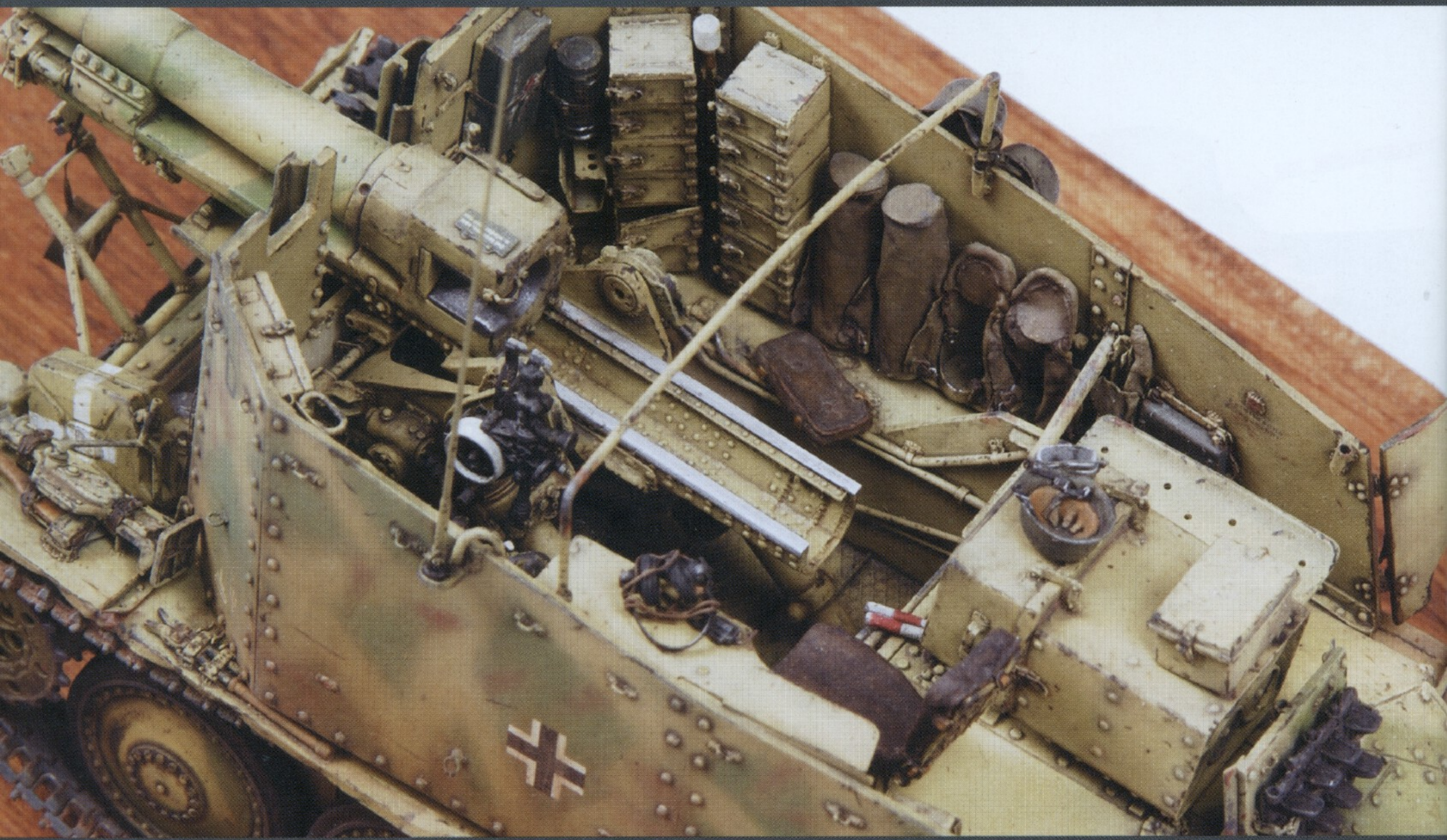
Mario Eens won Gold for his superbly finished E10

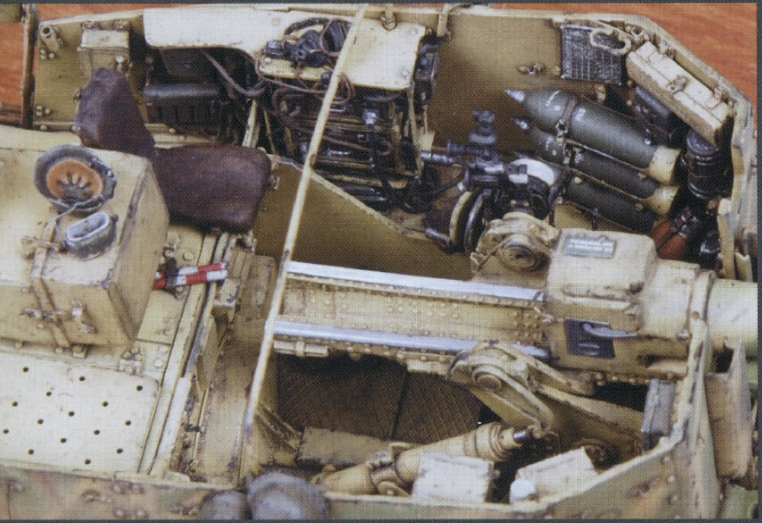


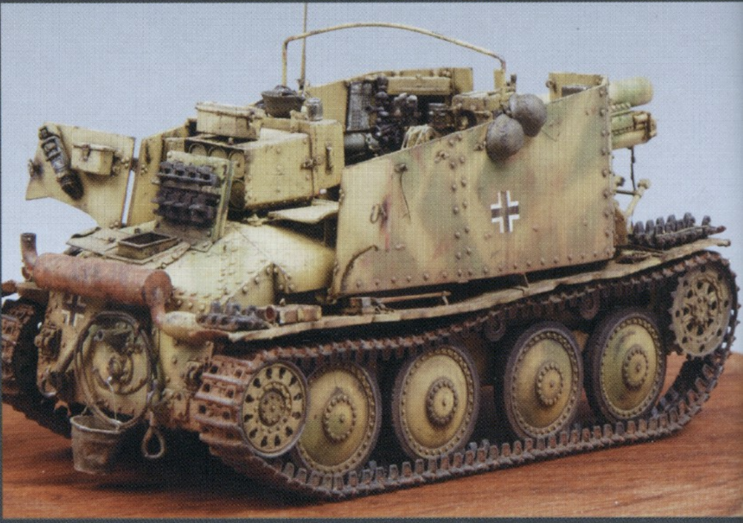




Martin Smith's largely scratchbuilt Grille Ausf H won Silver



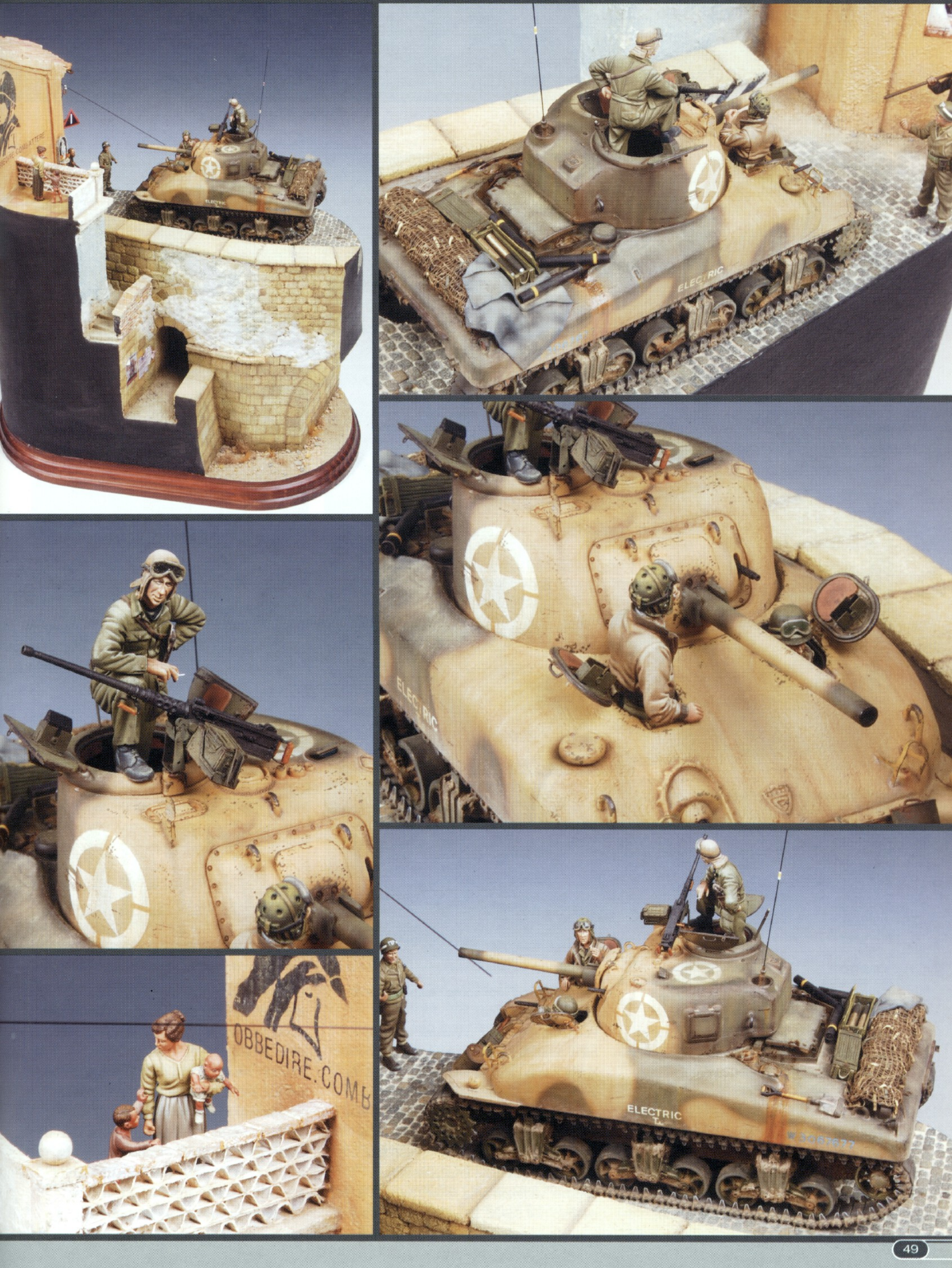




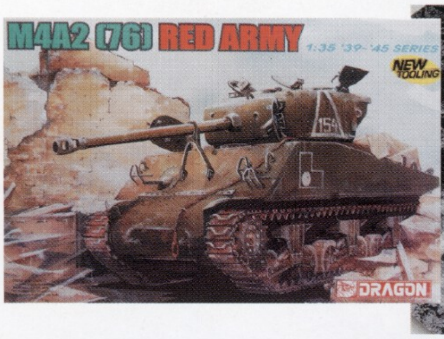
ELECTRIC

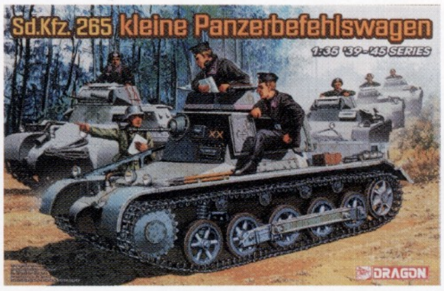
TRIC
W 3067677

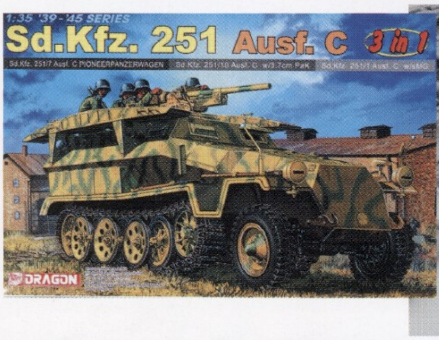
Javier Redondo Jimenez won a Silver for 'Arrivederci Duce' with this wonderfully finished Sherman.

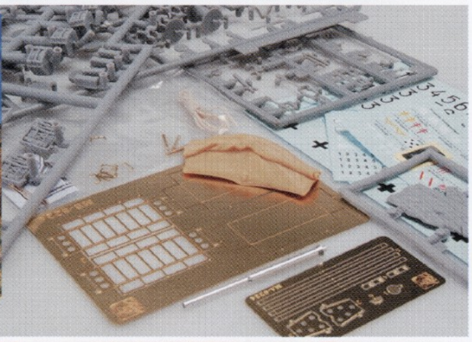

ELECTRIC
OBBEDIRE.COMB

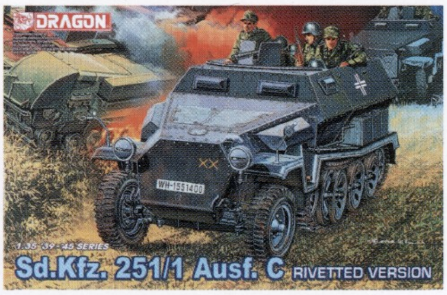
Keeping Track - new releases

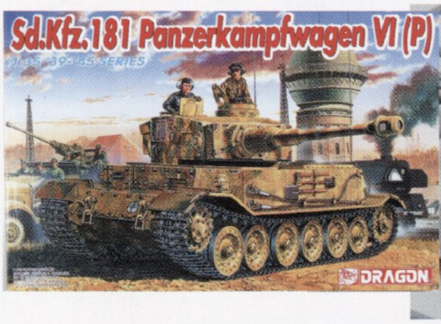

M4A2 (76) RED ARMY
1:35 '39-'45 SERIES
NEW TOOLING
DRAGON

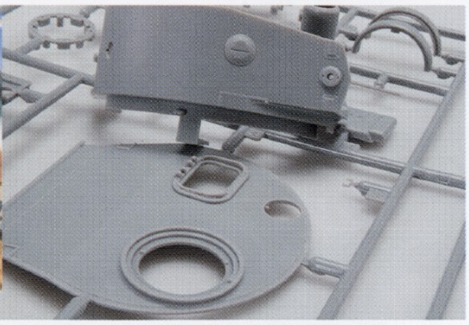

Sd.Kfz. 265 kleine Panzerbefehlswagen
1:35 '39-'45 SERIES
DRAGON

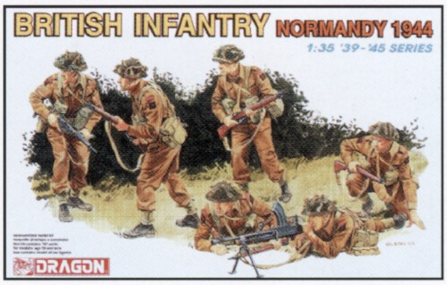

1:35 '39-'45 SERIES
Sd.Kfz. 251 Ausf. C 3 in 1
DRAGON

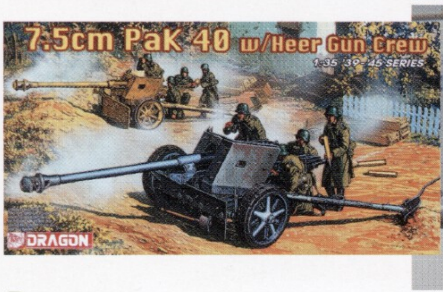


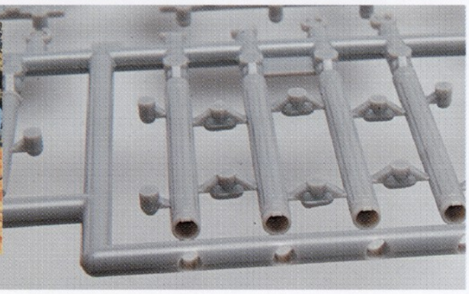

DRAGON
1:35 '39-'45 SERIES
Sd.Kfz. 251/1 Ausf. C RIVETTED VERSION

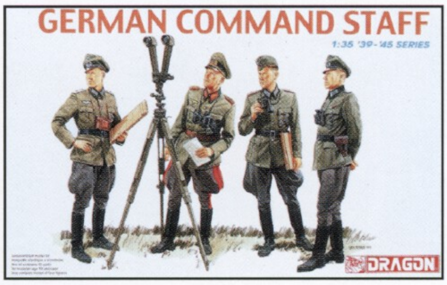

Sd.Kfz.181 Panzerkampfwagen VI (P)
1:35 '39-'45 SERIES
DRAGON




BRITISH INFANTRY NORMANDY 1944
1:35 '39-'45 SERIES
DRAGON


7.5cm Pak 40 w/Heer Gun Crew
1:35 '39-'45 SERIES
DRAGON




GERMAN COMMAND STAFF
1:35 '39-'45 SERIES
DRAGON

Dragon

Dragon are obviously trying to bury us all under an avalanche of unmade injection moulded plastic with an incredible rate of new releases and re-releases. First up is the new Red Army M4A2 with Dragon having made an effort to get this correct with new tooling and the kit looks great coming with a choice of suspension, great looking 3 bar cleat tracks, aluminium barrel, etched fret with headlamp and periscope guards, mantlet cover, clear sprue with periscopes and headlamps and a metal tow rope. Detail is good with some nicely rendered texture on the turret.

Following on from the Panzer 1B Dragon have released the command version which is the same base kit with extra sprues for the raised superstructure and it gives a choice of cupola styles. It is good to have a modern version of this vehicle available even though the old Italeri version has lasted well this is an improvement.

Another variation on a recent release is the rivetted hull SdKfz. 251Ausf C - essentially the Ausf C kit with a new sprue for the rivetted hull panels, its good to see Dragon cover this rather than simply moving on to other projects.

The 251 Ausf C 3 in 1 pack is one such project and it wins the prize for the most sprues crammed into one box - 21 in total! This is the Ausf C with parts included to build either the 251/7 Pioneerwagen, 251/10 with 3.7 Pak or 251/1 with remote control front MG mount. To describe this kit as comprehensive is an understatement - it

Sd.Kfz. 251/22 Ausf. D
1:35 '39-'45 SERIES
DRAGON

supplies 2 etched brass frets, turned gun barrels, tarpaulin, turned brass width indicators and 3.7cm shells, along with an enormous selection of pioneer tools and equipment. For me the really good thing about this is the fact that Dragon are covering some of the obscure variants like the remote MG mount which we would normally have had to rely on the aftermarket boys to deal with.

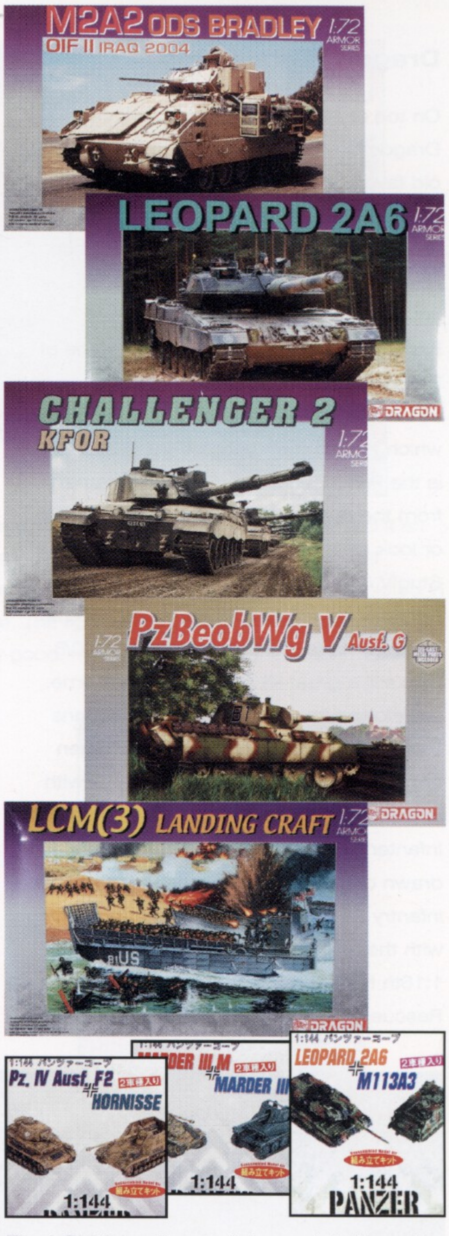
The Sdkfz. 181 Tiger 'P' is another new release with new tooling and the quality is again excellent with the turret mouldings boding well for the forthcoming Tiger releases with some extremely fine moulding. I was a little disappointed with the vision slots on the cupola but these can be improved and the cupola does have interior detail.The kit has an etched fret for engine deck screens and braided metal tow ropes and single length tracks moulded in this new Dragon 'soft' plastic.

Dragons new Pak40 also comes with a selection of extras including an etched fret, aluminium barrel, turned brass ammo along with plastic ammunition and containers which are hollow as our picture shows. The kit includes a choice of 3 types of muzzle brake, three types of wheel and 2 sets of rubber tires, one new and one worn which is a nice touch. The gun shield is admirably thin and a four man crew is also included. On the downside Terry Ashley has pointed out that the gun trunion is significantly short and the trail arms are far too long. It looks like Dragon may be doing something about this oversight as the Pak 40 sprue for the 251/22 kit has a new corrected trunion.

The new SdKfz 251/22 also features new tooling with the later style of engine deck as well as including the original. Dragon have reworked the roadwheels and the driver's seats now have sunken seat backs with very delicate spring patterns on the reverse. the kit includes 4 crew figures based around the old MG crew set as well as a driver and the late pattern 'EZ ' tracks as well as the regular early pattern. There is also an etched fret, clear sprue for visors, four brass rounds, aluminium barrel and crew jackets.

There are 2 new figure sets, the most welcome British Infantry set which is a great six figure set in a useful mix of poses including a 2 man Bren team. The kit comes with choice of plain or camouflaged steel helmets, the camouflaged version being very well handled. The German Command staff are obviously designed to compliment the recently released 251/6 and the poses are just great, I especially like the chap on the right leaning back slightly.

Moving to 1:72nd scale now Dragon have released an OIF version of the Bradley complete with external stowage racks the kit is nice and crisp and features extremely good quality rubber tracks. The Leopard 2A6 is even better with incredible detail on the main hull and turret mouldings even anti-slip panels are included. Like wise the KFOR Challenger 2 is beautifully rendered - it being essentially the same kit as the OIF version that has already been released minus the add-on armour. The Pz BeobWg is a modification of the standard panther G kit with a new sprue for the altered turret and as such features the die- cast hull which is a shame as the rest of the kit is very good.



The LCM 3 landing craft is a a delight and comes with a section of infantry figures complete with individual weapons and is supplied with a vac formed clear plastic sea/beachscape for your instant diorama - a nice touch.

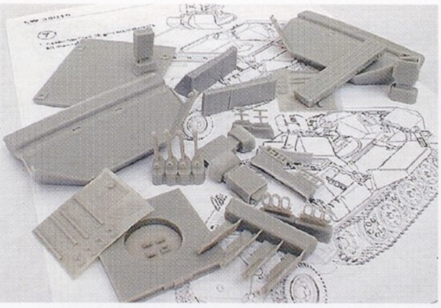
In 1:144 scale there have been further releases and as before they come complete with decals and in most cases a small etched fret. From WWII there is a Marder III and Marder IIIM, a panzer IIB and Panzer IIIE, Panzer IV F2, Hornise, Panther G and Nashorn. Modern subjects are Challenger 2 and Warrior, Leopard 2A6 and M113A3, Leopard 2A4 and 2A5 and Leopard 1A4 and 1A5.

Keeping Track - new releases

Dragon Re-releases

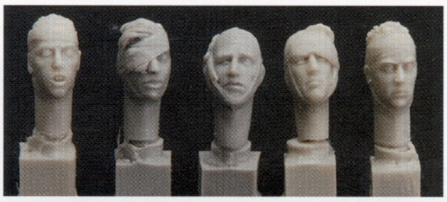
On top of all those lovely new releases Dragon have re-released a good number of old favourites - some of which came and went very quickly so if you missed them first time around or you need to restock then now is your chance.

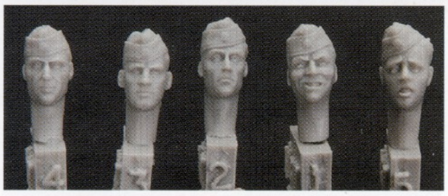
First up is the Panzer III Ausf M/N - one of Dragons later Panzer 3 variant releases and as usual it has a whole host of spare sprues which are always welcome. Also back again is the Panzer III Ausf E - a great kit apart from the cupola which doesn't fit together or look anything like it is supposed to. The StugIV late also makes a welcome return as the kit of choice for this particular vehicle. Another old favourite is the SdKfz. 250/8 Neu still a great kit and always welcome. For those with model railway inclinations there is the Schwere Panzerspahwagen armoured train and the railway track with embankment. The 8.8cm Panzerschreck Infanteriekarren set which is the horse drawn double trailer and associated walking infantry thing makes a reappearance along with the Flkpanzer 'Coelian' and in the 1:16th figure series the 'Gran Sasso Rescue' Fallschirmjager is available again.



Leadwarriors

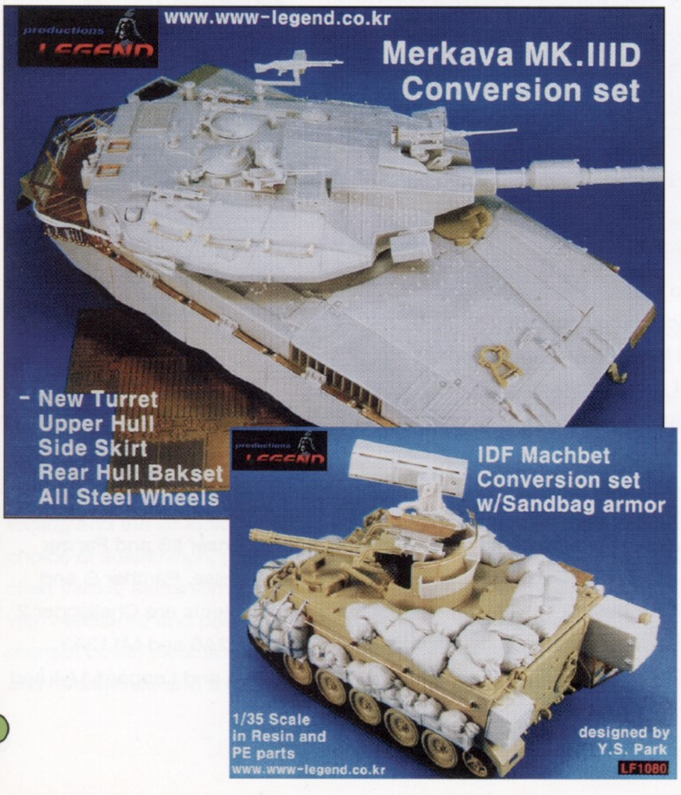
Russian company Leadwarriors have released 2 conversion kits for the Dragon SdKfz 251C kits to convert them to the 251/17 - the drop side Luftwaffe Flak variant. The basic Flak conversion includes new side armour which can be fitted up or down and the raised bed for the flak along with modified stowage bins and rifle racks. The Command variant is identical but includes the radio installation at the rear of the hull and the big frame ariel complete with pre-bent metal frame. The casting quality is superb and the kits are supplied with very clear CAD generated instructions.
Available from www.leadwarriors.com or AFV Modeller.





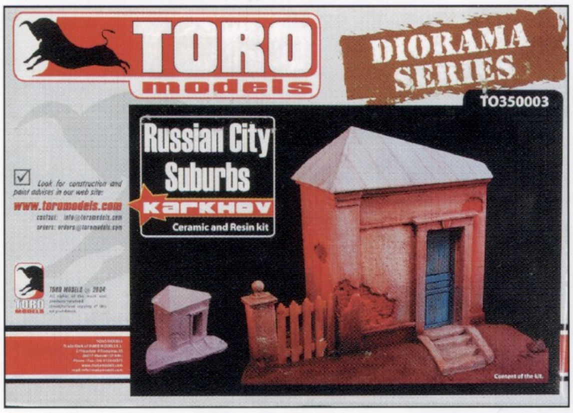
Hornet

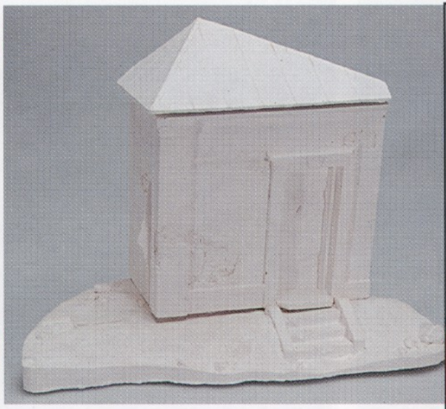
Hornet have added to their extensive range of heads for every occasion with HH23 a set of bandaged heads and HGH17, a new set depicting SS pattern sidecaps although they can easily be converted to Luftwaffe or Kreigsmarine. Not much to say about these because Hornet are the heads of choice for most serious modellers. They are the benchmark and any addition to the range is always welcome. Also from Hornet is UH02 a set of 3 Modern US Tank crew - 2 half figures and 1 head and shoulders. From Hornet's sister company Wolf comes WAW48 a late WWII German soldier semi reclined in a greatcoat with equipment near by.

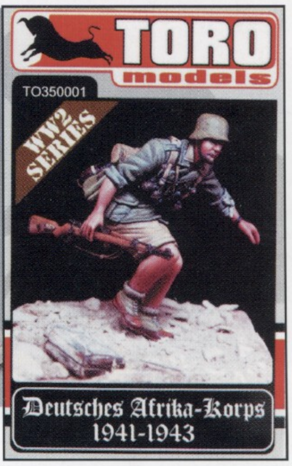


Legend Productions

Just look at this Merkava IIID! Without doubt this is an extremely handsome vehicle and this is an extremely attractive kit from Legend. As a conversion kit you will need to add an Academy Merkava kit from which you will need the lower hull and running gear and a few other details but this comes very close to being a full kit. As with previous releases the kit includes etched frets along with wire and rope and even supplies the hanging ball and chain arrangement from the turret stowage rack. The casting quality is first rate and the only obvious omission is the absence of anti-slip texture from the hull and turret.
Sticking with the IDF we have this Machbet conversion set which is again designed to fit the Academy kit. This is another comprehensive kit with etched brass fret and a big bag of clean resin castings. The sandbag armour is well handled but unfortunately the excellent full colour instruction give no mention of their positioning so that you have to rely on the box top picture. Aside from this small oversight this looks like another excellent Legend conversion set and its bound to be popular with IDF fans.
The Legend range is available from Moredun Models
Tel/fax: 0131 653 2001
or email moredunmodels@btconnect.com

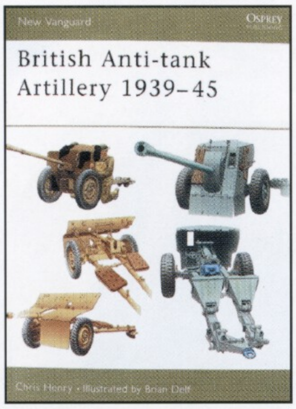

TORO models
DIORAMA SERIES
TO350003
Russian City Suburbs
KARKHOV
Ceramic and Resin kit
www.toromodels.com
Content of the kit.




TORO models
TO350001
WW2 SERIES
Deutsches Afrika-Korps
1941-1943

Toro Models

Toro are a new Spanish manufacturer who so far offer a mix of diorama accessories and figures and very good they are too. We have a couple of samples from them and begin with the Russian City Suburb diorama set which consists of a corner of a typical Karkhov style building set on a small bank with steps leading up, and a small section of fence. It is mostly cast in plaster with the exception of the fence and door which are resin and the quality is excellent and it is ideal for creating a convincing backdrop to a diorama. The first release in their figure range is an Afrika Korps infantryman depicted in a stooped running pose. The figure is resin cast in 8 parts and the sculpting quality is very good - it will be interesting to see how this range develops.


New Vanguard
OSPREY PUBLISHING
British Anti-tank Artillery 1939–45
Chris Henry • Illustrated by Brian Delf

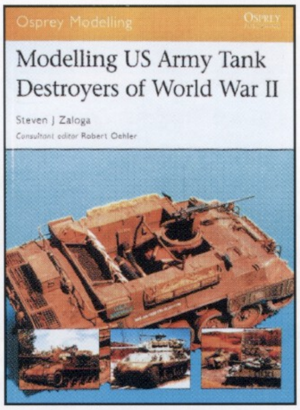
British Anti-Tank Artillery 1939-45

By Chris Henry

Published by Osprey Tel(01933) 443 863

www.ospreypublishing.com

This new book covers an often overlooked area, WWII British anti-tank weapons beginning with the already obsolete 2pdr and covering the 6 pdr, 17 pdr and 32pdr as well as recoilless weapons and covers firing drill, tactics, organisation and ammunition. The book has the usual Osprey colour illustration section which includes some self-propelled uses of key weapons like the Archer and Achilles. There is a good selection of black and white photos of the various guns and a limited selection of the ammunition and although I would have preferred to have seen more shots of the guns in service this is still a most useful reference.


Osprey Modelling
OSPREY PUBLISHING
Modelling US Army Tank Destroyers of World War II
Steven J Zaloga
Consultant editor Robert Oehler

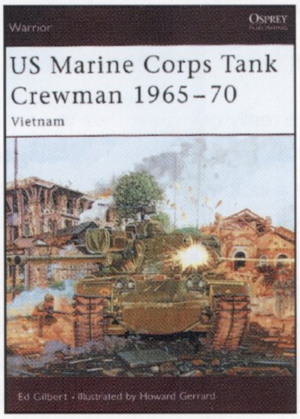
Modelling US Army Tank Destroyers of WWII

By Steven Zaloga

Published by Osprey Tel(01933) 443 863

www.ospreypublishing.com

Any modeller who can fit a 3 man crew inside an M10 or M18 turret deserves considerable respect and Steve Zaloga does just that in his latest volume in the Osprey Modelling series. The book follows the usual format with projects of increasing complexity culminating in the M39 artillery tractor featured on the cover. The book is well illustrated with sequential assembly shots and useful details from the real vehicles to assist the modeller and perhaps most usefully the author sorts out the shortcomings of the various kits and recommends the best choice for each subject. Another excellent guide from a most respected modeller with much to impart - excellent.


Warrior
OSPREY PUBLISHING
US Marine Corps Tank Crewman 1965–70
Vietnam
Ed Gilbert • Illustrated by Howard Gerrard

US Marine Corps Tank Crewman 1965-70

By Ed Gilbert

Published by Osprey Tel(01933) 443 863

www.ospreypublishing.com

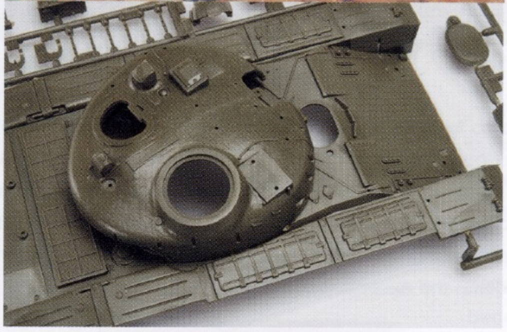
A complete insight into the life of a Marine Corps tank crewman during the Vietnam conflict is what this latest release in the Osprey Warriors series gives you. The book covers training, dress and everyday life supported by excellent illustrations by Howard Gerrard. For me though the book really comes into its own with Ed Gilbert's evocative recounting of the combat experience which gives the reader a real insight into armoured combat in all its grim reality including the experiences of crews whose vehicles were penetrated by RPG's. making it a great reference..

Keeping Track - new releases

ЗВЕЗДА
РОССИЙСКАЯ БОЕВАЯ МАШИНА ДЕСАНТА
БМД-2
BMD-2
RUSSIAN AIRBORNE FIGHTING VEHICLE
№ 3577
SCALE МАСШТАБ 1/35

ЗВЕЗДА
ОСНОВНОЙ БОЕВОЙ ТАНК
Т-80БВ
T-80BV with ERA
MAIN BATTLE TANK
№3592
SCALE МАСШТАБ 1/35

ЗВЕЗДА
РОССИЙСКИЙ БРОНЕТРАНСПОРТЁР
БТР-80А
BTR-80A
RUSSIAN ARMORED PERSONNEL CARRIER
№ 3560
SCALE МАСШТАБ 1/35



Zvezda

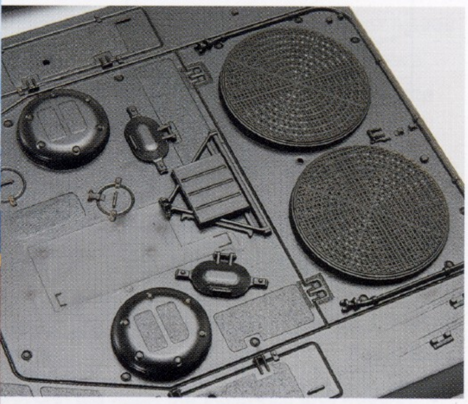
I have to admit that its been a while since I really paid much attention to Zvezda. These three releases are something of a wake up call and quite a surprise. The overall quality is really good with no flash and some incredibly fine details and textures. The BTR-80 features nicely rendered weld beads along the hull joints and the T-80 has some nice texturing on the turret. The BTR features solid hard rubber tires whilst the BMD-2 has 'rubber band' tracks these are well moulded and the T-80 has some good quality link and length tracks. The side skirts on the T-80 are nicely moulded to capture the ripple pattern in the rubber and look most convincing. Overall it looks like all 3 kits will build into very attractive models.

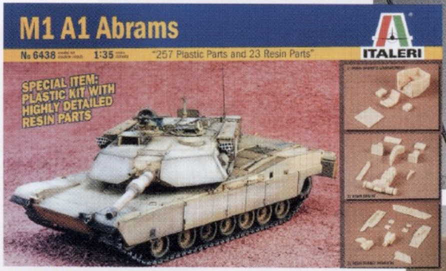
Italeri

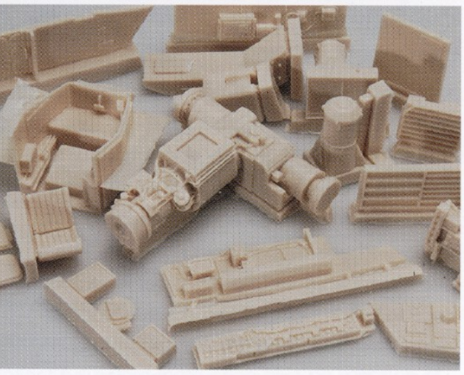
Italeri are really giving the likes of Tamiya a run for their money with this Leopard 2A6, just take a look at our picture of the engine deck - not much to argue about there and this even has anti-slip panels moulded in place! The kit includes open turret stowage bins and supplies plastic mesh to make up turret baskets along with ammunition and crates and includes the deep wading tower for the commanders cupola - its a cracking kit.

The M1A1 offers something different in the form of a whole collection of resin detail parts along with the injection moulded kit. The resin parts are good quality and they include a fairly complete engine bay, the drivers compartment and a basic turret interior. The plastic kit lacks the definition of the Leopard with some soft areas but it does include the anti-slip texture and would form a good basis - I guess for many modellers the resin bits will be temptation enough. Two small scale releases now both six wheelers and the quality of both the DUKW and M8 is good with some nice details like the fenders on the DUKW. The M8 has a fairly complete interior and separate mudguards but the flared muzzle looks a little suspect.

Leopard 2 A6
№ 6435
1:35
ITALERI




M1 A1 Abrams
№ 6438
1:35
"257 Plastic Parts and 23 Resin Parts"
ITALERI
SPECIAL ITEM: PLASTIC KIT WITH HIGHLY DETAILED RESIN PARTS



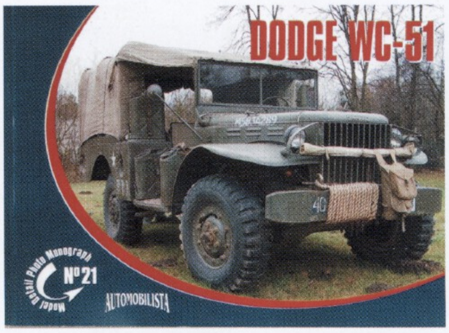
M-8 Greyhound
№ 7023
1:72
ITALERI
OPERATION OVERLORD

DUKW
№ 7022
1:72
ITALERI
OPERATION OVERLORD

TAMIYA
1/48
GERMAN KÜBELWAGEN TYPE 82 AFRICA-CORPS

Tamiya

Tamiya have followed up on their 1:48th scale Kubel with this North African version - essentially the same kit but with fat sand tires replacing the thinner European versions and the kit includes a pilot figure and driver and it's Tamiya so the quality is great.


DODGE WC-51
Model Detail Photo Monograph
Nº21
AUTOMOBILISTA

Dodge WC-51 Model Detail Photo Monograph N0.21

Published by Rossagraph

This latest release in this handy photo reference series covers the Dodge WC-51 beginning with a small selection of archive images before climbing all over a well preserved example. The book mixes black and white and colour sections and the coverage is extremely thorough with shots of the underside as well as every small detail. The book also includes some reproduced line drawings from the vehicles manual which are useful. Text is in both Polish and English and it is really a one stop reference for the modeller. Our sample was provided by POL Models Tel: 020 8992 3822 or email Polmodels@AOL.com

1/35
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HIGH QUALITY
PzIV F1
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Resin set
For TAMIYA PzIV H (35209)
MP 35-125

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T55
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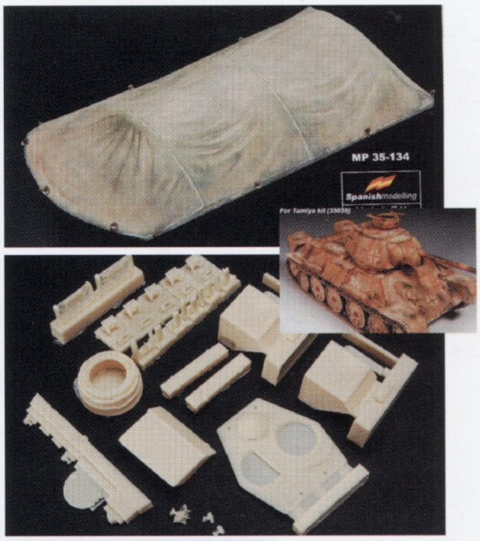
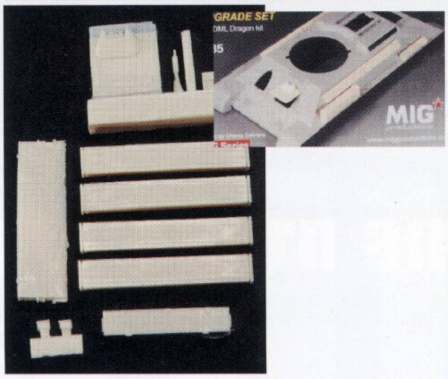




MIG Productions

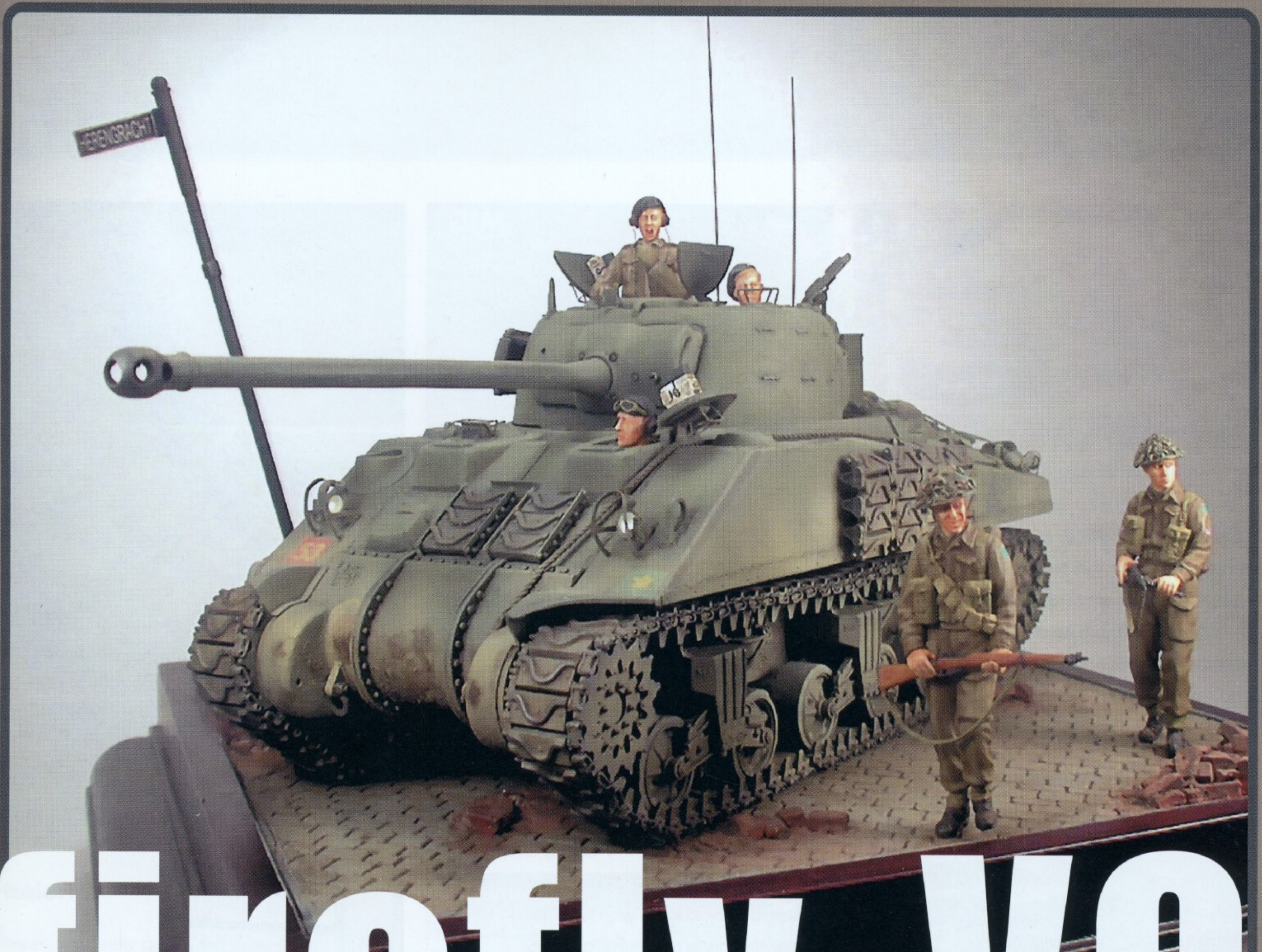
An interesting selection of new releases from our Spanish friends at MIG Productions beginning with the most excellent Panzer IV F1 conversion which was mastered by the talented Steve Van Beveren - see his Brumbar in Issue 19. The quality is spot on and the kit includes what must be the best available PzIV cupola with full interior. On a similar theme is the Burnt out T55 conversion set which supplies new wheel rims minus tires, distorted fuel cells, partial engine bay and replacement mantlet, gun and searchlight. I like these knocked out vehicle conversions, if you plan to model something like this then they save you a lot of work. There is another new conversion set to convert a T34/76 1943 model to one in German service with another of those great cupolas, new roof, fuel tanks and stowage bins. There is an update set for the Dragon T34/76 model 1940 with new stowage bins, and replacement drivers hatch with interior details and lastly a convincing single piece tarp to fit the abundance of SdKfz 251 kits.

Schwerer Geländegängiger Lkw
MERCEDES BENZ L4500A
mit 3,7cm Flak 36
WMM 35002
WIENER MODELLBAU MANUFACTUR

Schwerer Geländegängiger Lkw
MERCEDES BENZ L4500A
mit 2cm Flakvierling 38
WMM 35003
WIENER MODELLBAU MANUFACTUR

Wiener Modellbau Manufactur

A new name to us and I suspect you, with some very exciting resin kits of the armoured cab Mercedes Benz L4500A truck. There is a choice of kit mounting either the 2cm Flakvierling or the 3.7cm Flak 36. Whichever version you fancy they both come with a fully detailed engine bay, etched brass frets, woven brass mesh for the drop sides and Schatton turned brass gun barrels with fully detailed flash supressors. The guns are not simply re-hashed plastic kits but are considerably more detailed with some very fine castings, and the complex four wheel drive chassis is also replicated.



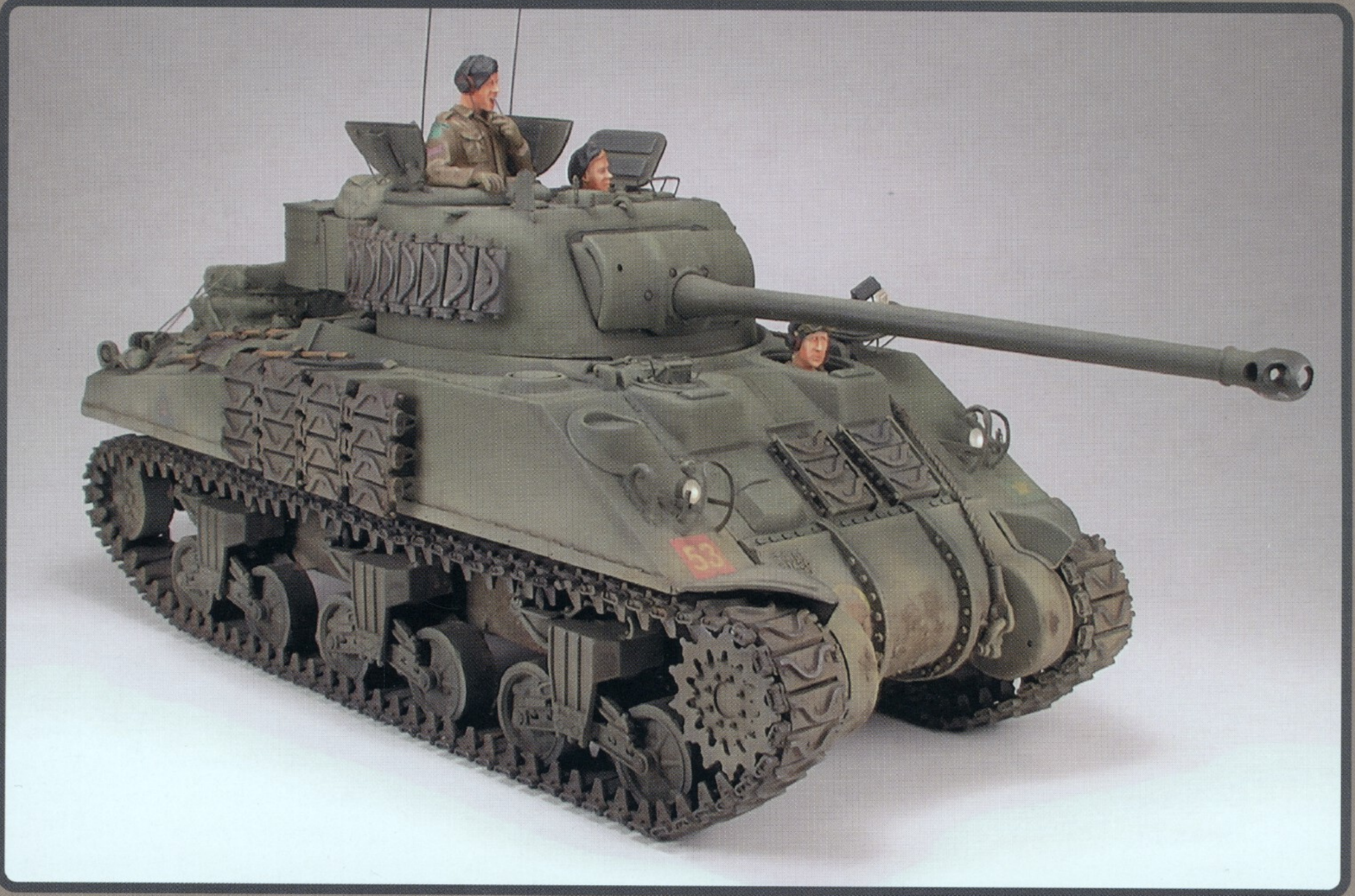
firefly Vc

Early on in the war it became apparent to the British that their main anti-tank gun of the day the 6 pounder (57mm) was quickly becoming obsolete. So, in 1941 the 17 pounder (76.2mm) anti-tank gun was unveiled. Not specifically designed as a tank gun the merits of this highly effective gun were soon proved and it was felt that it had to be mounted in a tank. The decision to mount this gun on the Sherman was far from straight forward and the mounting of the gun with its long barrel and breech meant that an armoured box had to be added to the rear of the turret to house the No19 radio set. An extra turret hatch was fitted for the loader as the breech disected the turret and he could no longer reach the commanders hatch.

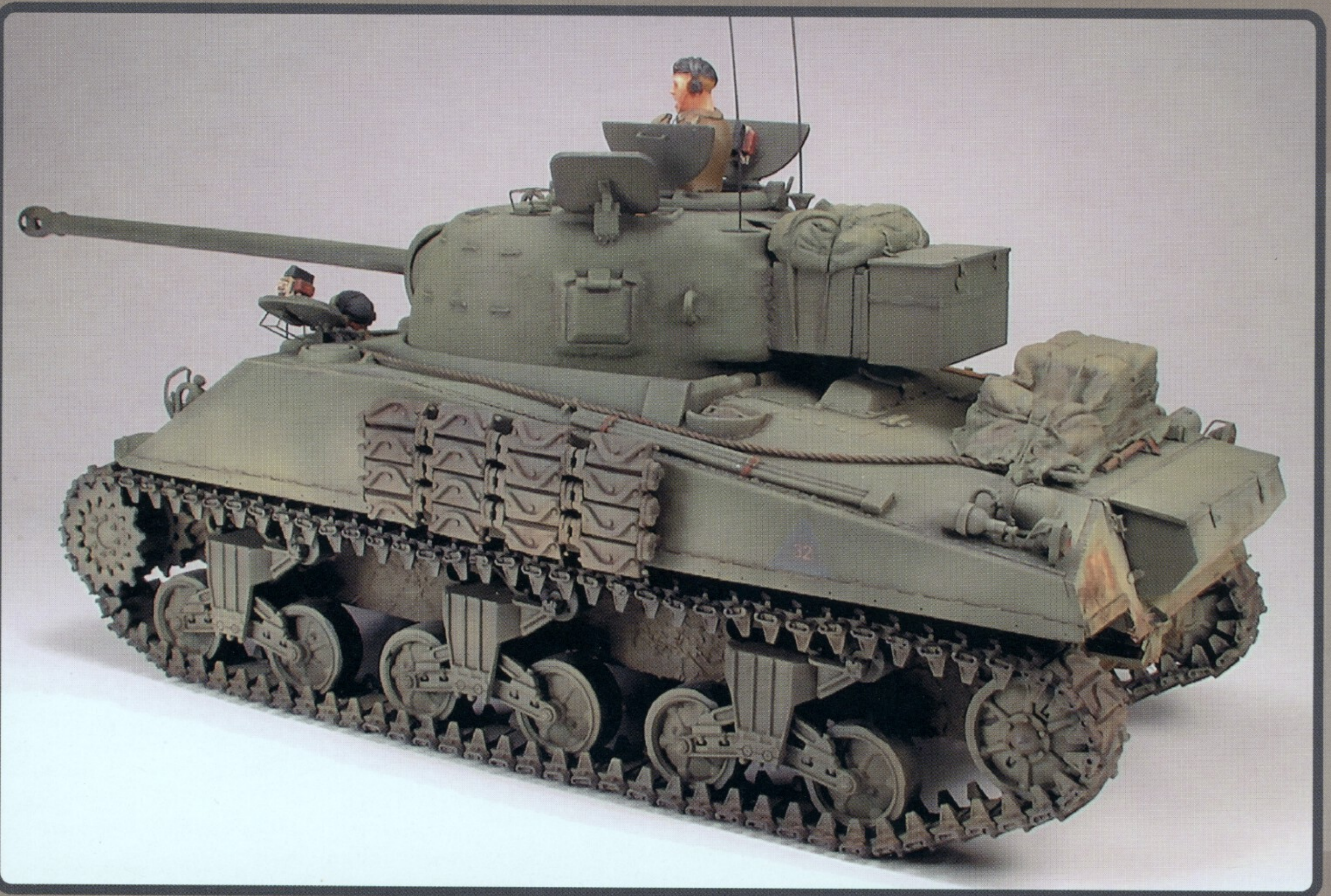
Moving down into the hull the turret basket had to be modified to allow access to the ammunition as it was moved below the sponsors and the co-drivers position was made redundant reducing the usual crew of 5 down to 4 men. So the .30 caliber bow machine gun was blanked off with a piece of armour plate. A box was added where the seat once sat for extra 17 pounder ammunition. All Sherman's armed with the 17 pounder had a "C" added to their names. For example a Sherman V (M4A4) would become a Sherman Vc. The 17 pounder was also added to the Sherman I and the Sherman I composite hull. It was also added to the M4A3 for US trials but was never used in combat to the best of my knowledge.

The Firefly was an effective and powerful weapon and was the only Sherman capable of taking on Germany's big cat's. The Tiger's and Panther's posed a real problem to the Allies and the Sherman Firefly carved out a spot for itself in history. Initially only one Firefly per squadron (1 in 16) was all that could be supplied. As more were shipped to the European mainland 2 per Squadron became the standard.

My Firefly represents a tank of the 28th Armoured Regiment (The British Columbia Regiment) 4th Canadian Armoured Brigade in support of the 10th Canadian Infantry Brigade on April 4th 1945.This takes place just after they fought there way over the Twente canal and North into the Dutch town of Delden.



Bryan Gray builds the 17pdr Sherman

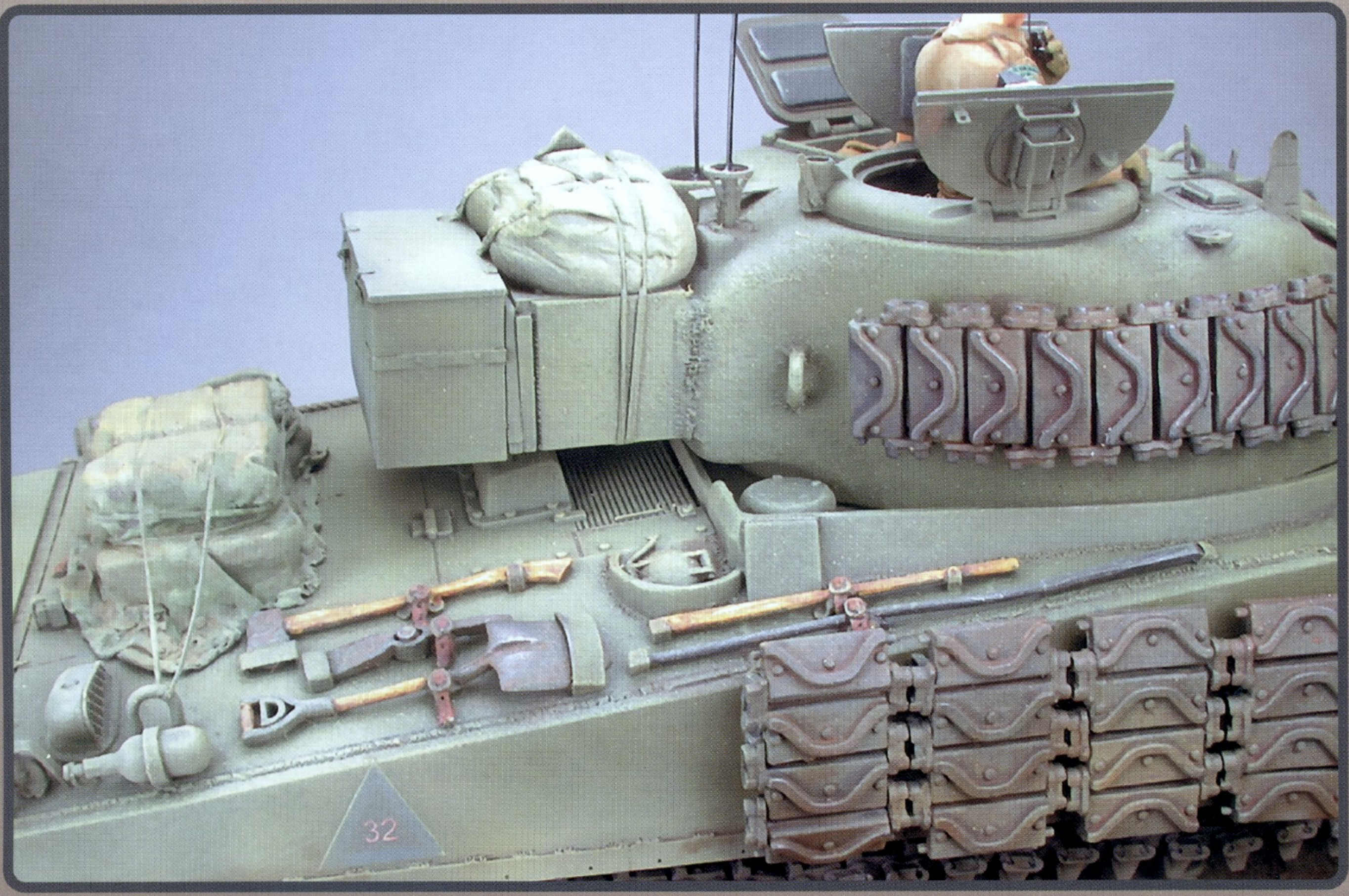


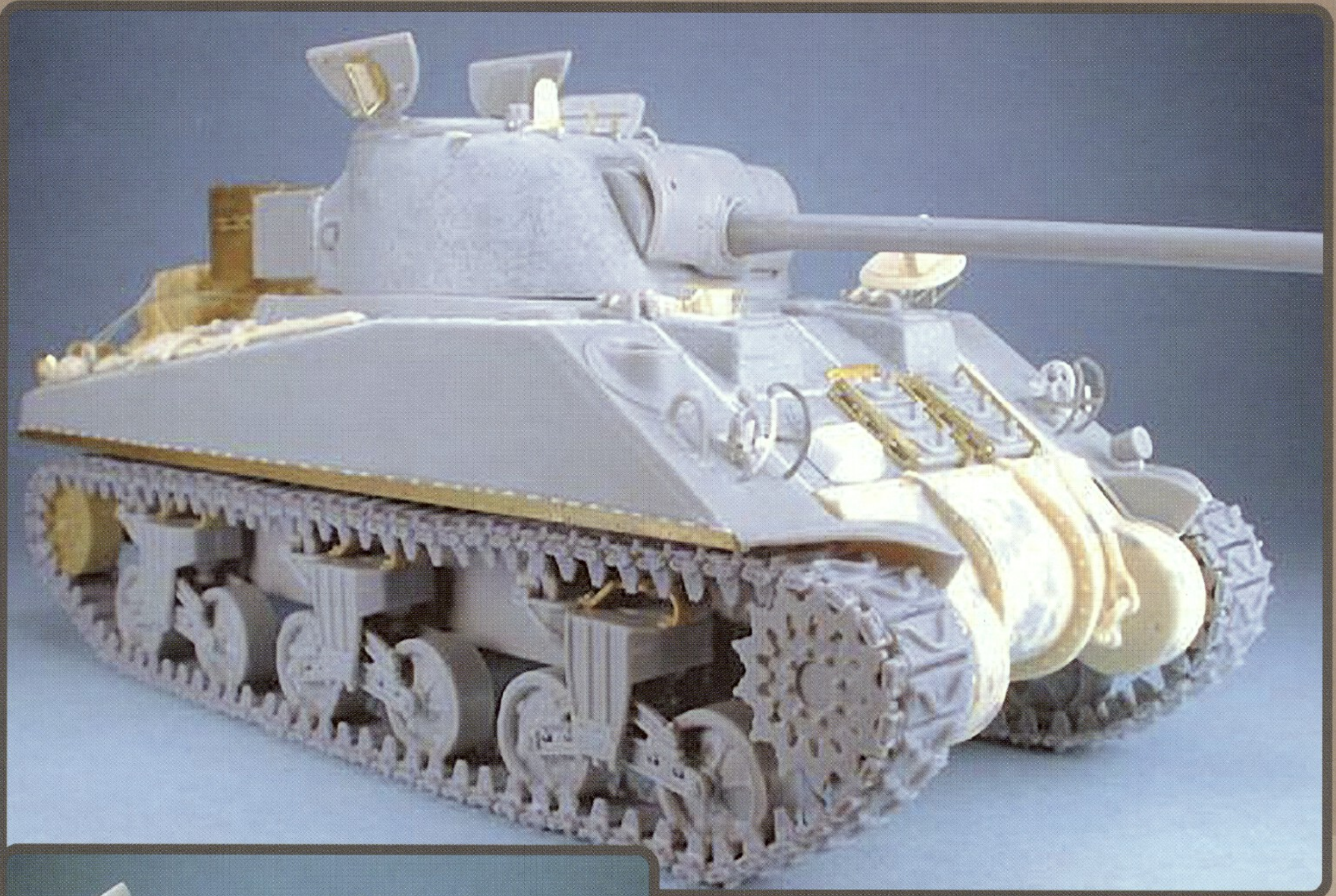
The Kit

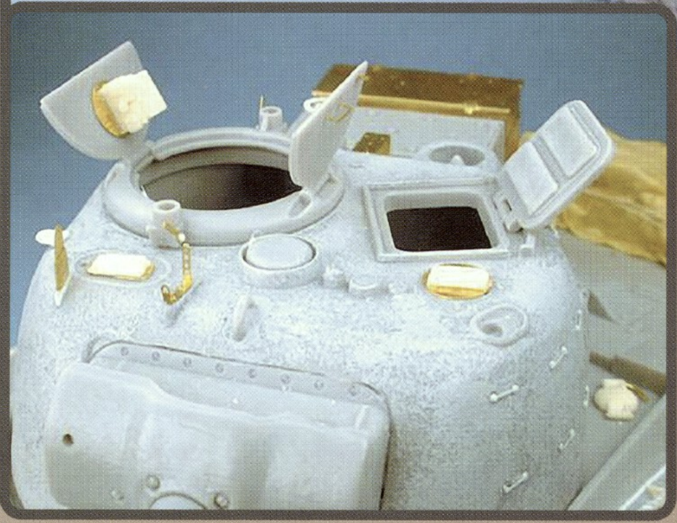
This is DML's third incarnation of the Sherman Vc Firefly. The first two attempts were plagued with inaccuracies and dimensional errors. DML's third swing at the bat has landed them a home run. There have been many reviews of this kit in magazines already so I wont bore you all with another. Instead let's get to the fun stuff. I decided to use a few update sets to improve the kit even more. I used the excellent Formations Firefly Vc update and Aber Photo-etch set #35033 M4A4/VC.

Upper and lower hull

Construction started with the suspension and the addition of the Formations 3 piece final drive assembly. The Casting of the Formations parts has become quite the hot topic amongst shermanaholics and this set was not an exception. The only real concern I have is the height of the mounting hole for the drive sprockets. They seem to be approximately 3mm to low making the tracks sag ever so slightly from the sprocket to the first return roller. The fix was simple and straight forward though. I just filled the hole with Tamiya two part epoxy putty and when dry I just re drilled the mounting hole 3 mm above the original. I added Academy Skid plates (borrowed from an Achilles) to the rather thick Dml offerings. I also used Academy rear idler's instead of the hollow backed Dml parts, saving the Formations wheels for another project. Moving on up the hull I used a combination of Dml, Formations and the Aber parts. On the upper hull I added all new weld beads with .20thou plastic rod soaked in Tamiya extra thin cement. Once the rod was pliable I added the weld marks with an old #11 X-acto blade. This is time consuming but well worth the effort. The undercuts on the driver and co-driver bulges were added next with a jewelers file. I felt the cast texture on the kit needed some improvement so I added more with tinned Tamiya grey putty mixed with Tamiya Extra thin cement. I mix up a small batch of putty and cement on a piece of scrap plastic and with an old brush I daub it onto the areas I want to look like cast metal. It's not an exact science and if you feel you've added too much once its dry you can lightly sand it down to the desired look. It was at this point I decided to add the spare track armor to the hull sides. I used the kit tracks for this application. I assembled 8 runs of 4 links and glued them to the hull in an up and down fashion as seen in my references. Heading to the rear of the model the Formations update comes to your rescue once again and of special note are the tools provided in the Formations Vc Update set, these are some of the nicest tools you will ever come across. They include the leather straps used to secure them to the vehicle. You also get nicely cast fire extinguishers and barrel cleaning rods. The sand shield mounting strips come from the Aber detail set and replace the horribly thick molded on parts from Dml. The welds used to attach the strips were done with 0.10 thou styrene rod and cement once again. At this point I added stowage to the rear deck pulled from the spares box. Once it was glued into place I rolled out some Tamiya two part epoxy putty into a very thin sheet. Using a piece of glass sprinkled with talcum powder to keep it from sticking to the dowel and the putty. Having let the putty rest for an hour I cut it to the desired shape and size and drape it over the



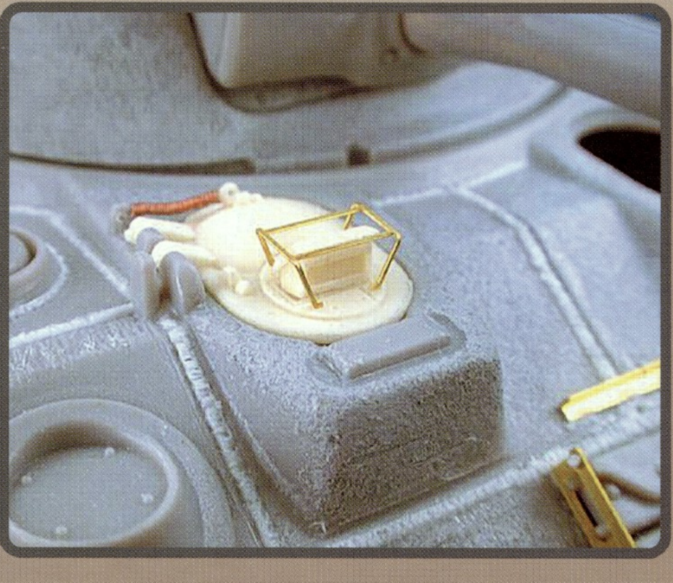


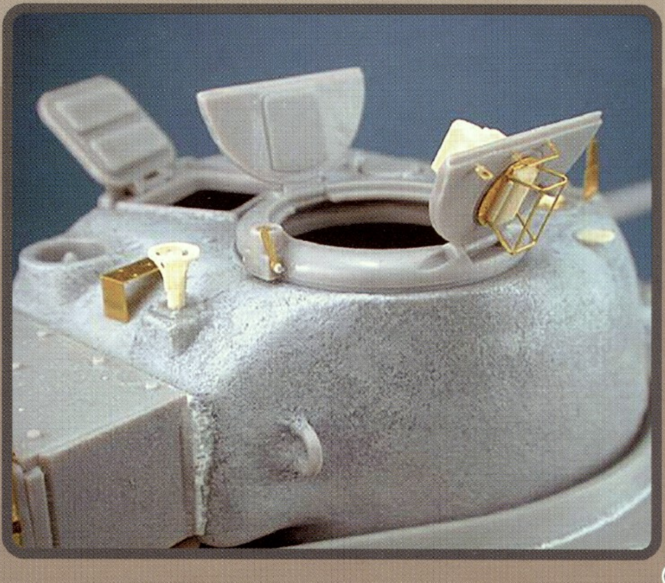


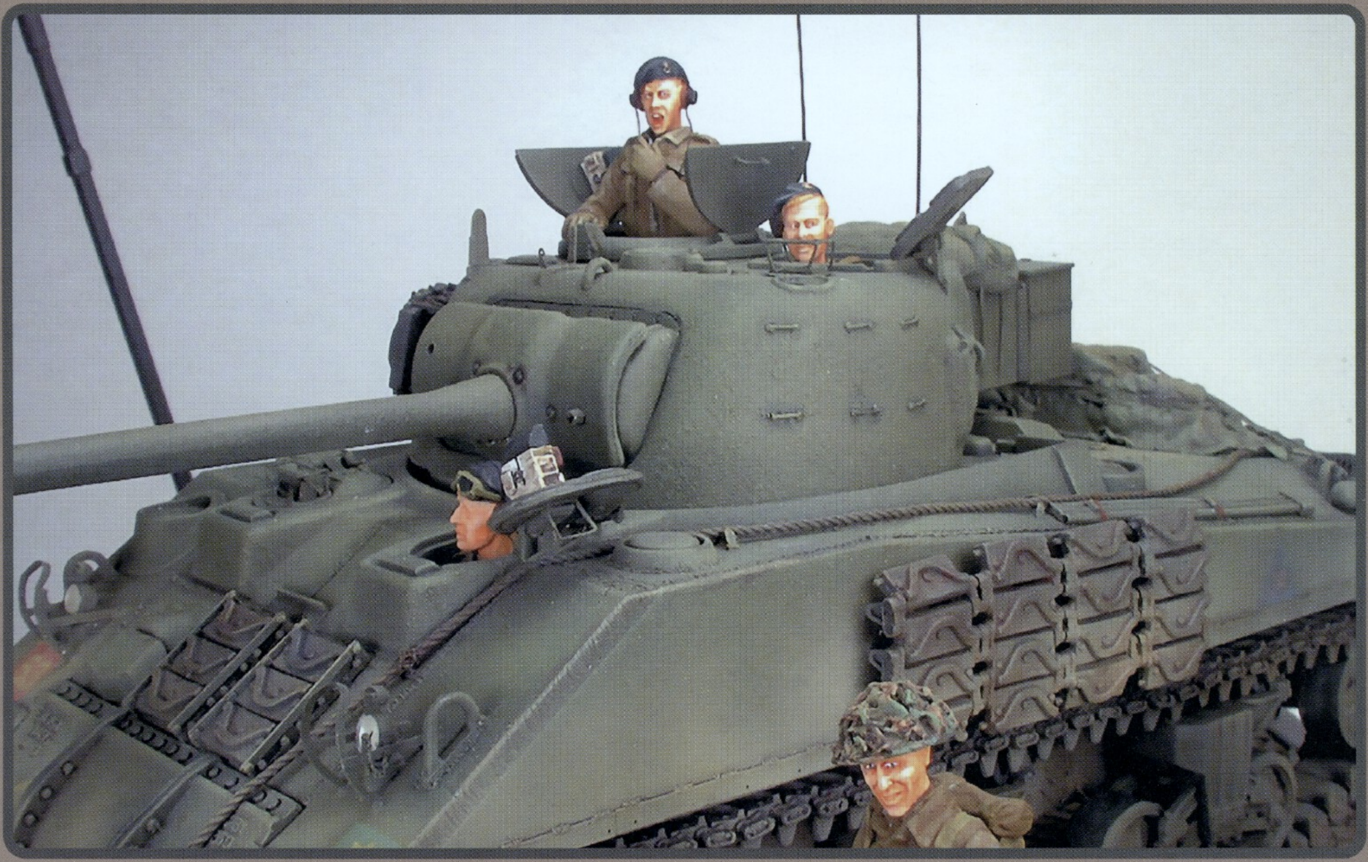
stowage. With the tip of a toothpick and a rounded over dowel I form folds and gathers in as realistic a way as possible. For the rope I use dental floss split into three and secured with a dab of super glue.

Turret

At this stage you have to decide which turret you are going to use. The kit provided turret is the early high bustle turret with pistol port. The Formations set provides you with the later low bustle turret with cheek armour ahead of the gunners station. The variant I chose was the early high bustle turret and thus saving the beautiful Formations turret for another firefly project. With the







help of Formations and Aber I was able to make the already nice Dml item even better. The first thing to do was to assemble the two halves and add the pistol port. Putty was used to blend the pistol port into the side of the turret and make it look cast on. Then the Putty and cement technique was used on the cast surfaces of the turret. I did this in 3 layers sanding in between each one to achieve what I feel is a more realistic cast texture. I decided to use the Formations barrel with a bit of modification. It is designed specifically for their turret but with a bit of tweaking in the way of shortening the base of the barrel it can be fit onto the Dml mantlet. I used various bits from the Formations and Aber sets to detail out the turret. The Rear stowage box is from Aber as are the iron sights. Another distinctive Firefly feature are the tie downs on the loaders side of the turret. I made mine with some punched out discs from a punch and die and

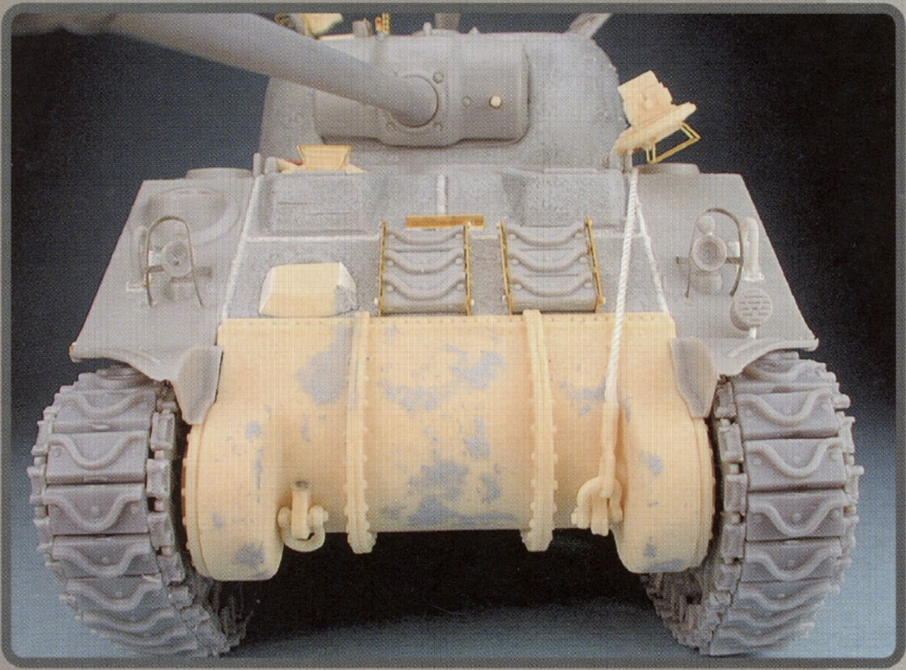
some very fine stretched sprue laid across. I now fashioned a camouflage net bag from epoxy putty and Photo etch buckles and secured it to the rear of the turret with dental floss rope. Finally the spare track armour was added to the right side as was common to Canadian tanks in NWE.

Tracks

The kit tracks are individual link to link with some pin marks on the outer surfaces located just under the centre rivet but as an added bonus the kit includes the extended end connectors. I decided to use the even nicer RHPS British Steel Chevron track. These tracks are very nicely done and construction is a breeze. Great care must be taken when cleaning up the end connectors as the plastic is quite thin and easily damaged. No glue is required to assemble them as they just click together. The tracks were sprayed flat black with a touch of burnt sienna added. Then, once dry I wash the tracks several times with raw umber and burnt sienna oil paint and then finally a light wash of desert yellow mixed with some MMP Powders brick red. A light coat of Testors Dullcote seals it all in and the tracks are set aside until they are needed.

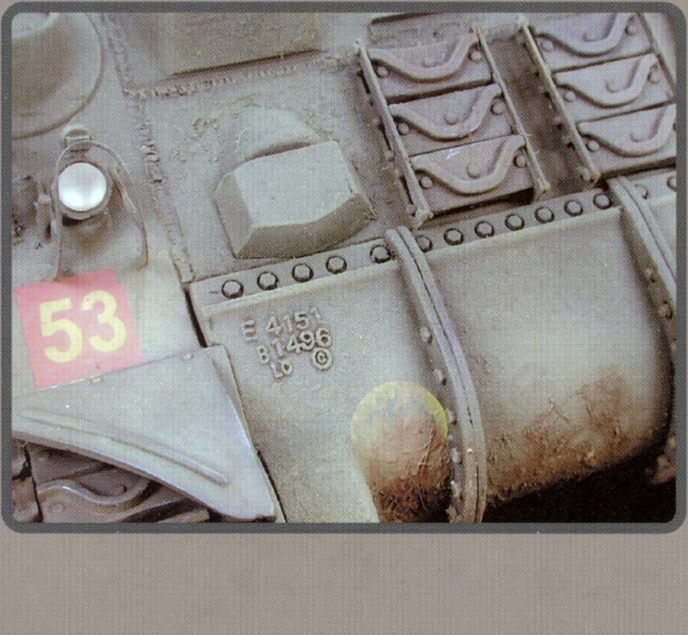
Painting and Markings

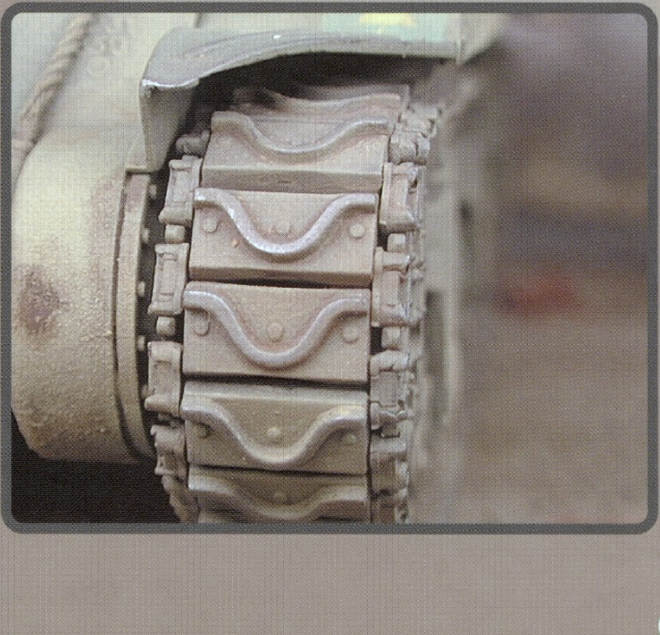
With all the different mediums used to build this model a good primer coat is an absolute necessity in my opinion. I also like to pre-shade my models as I believe it gives a nice depth to the paint job. So, I tackle both of these issues at once. I use a product called Tremclad. It's a paint designed for outdoor applications and can be painted over rust and is safe on plastic as well. I believe there are other manufacturers such as Rustoleum etc. It sprays out of the can very evenly and when dry gives a nice tight finish revealing any imperfections that might have to be taken care of before the base coat is laid down. For my base coat I use Tamiya Olive Drab XF-62 mixed with approximately 10% Tamiya XF-59 Desert Yellow. I then thin with Tamiya thinner X-20A at a ratio of 60-40 paint to thinner. Once the base coat has dried overnight I do a little post shading by adding more yellow to the base colour and spraying just the centres of panels for a faded effect. Once everything has dried overnight I do the detail painting. I start with the tools by painting all the



wood areas with Tamiya XF-59 Desert yellow and the metal parts flat black. Once dry I "stain" the wood with a thick wash of burnt sienna oil paint thinned in white spirits. After letting the wash dry for approximately 10 minutes I gently pass over a wide soft brush to remove some of the oil paint. This does two things, firstly it adds a very subtle wood grain effect and secondly it reveals some of the base coat giving a slightly worn look. I now do pinwashes with raw umber oil paint in all of the recessed panel lines and all the welds etc. Following the washes I do some very light drybrushing with a lighter shade of the base colour to bring out the textures on the model. A lot of modellers are of the opinion that washes and dry brushing are a thing of the past but I believe that used with some of the newer methods you get a very realistic and multi dimensional model.

I then spray Future onto the areas that are going to receive decals..I had originally picked up the Quartermaster Depot's Canadian Sherman set #1. My first impression of them was that they were quite good and well printed. Unfortunately my research later showed that the arm of service markings were the wrong colour. They should be red panels with white numbers. I also noticed that the bridge class decals provided were the wrong weight class. Regular Sherman V's have a bridge class of 30 tonnes and a Firefly is 33 (note: I have since spoken with Dana Nield of QMD about the bridge class and colour





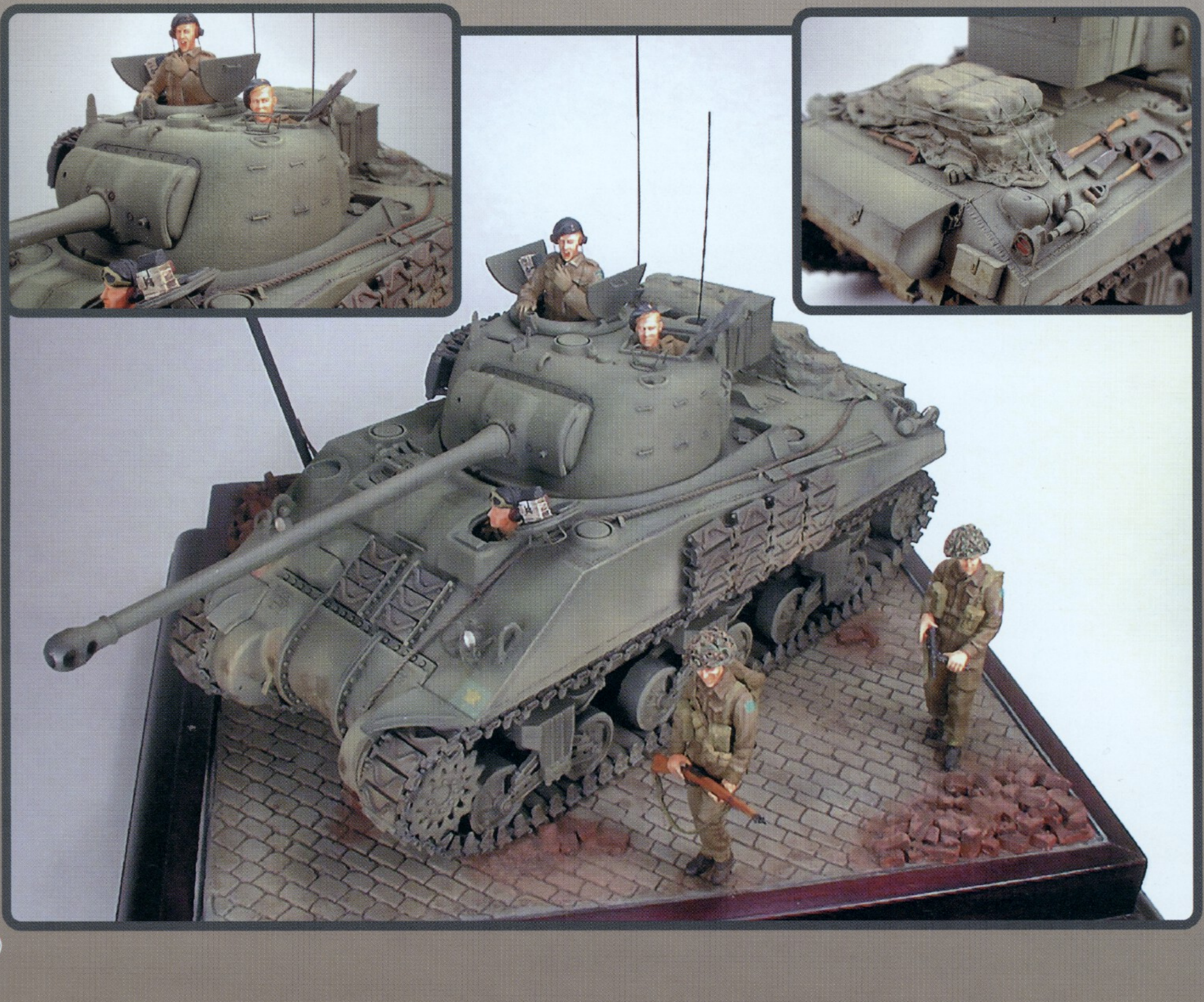
problems and he noted that this will be fixed on all future sets and I really appreciated the effort). So I decided to make my own deals for this project. I used Photoshop to draw the markings and my Brother MFC 5100 inkjet photo quality printer and some clear and white decal film to print them out. It's not a complicated process and can be done by anyone with a decent printer and drawing/photo software. Once the decals were printed out I simply sprayed them with Testors semi-gloss varnish and once dry I applied them to the Firefly with Micro set and Micro sol, followed by two light coats of Testors dullcote lacquer thinned with white spirits sprayed though the airbrush.

Weathering

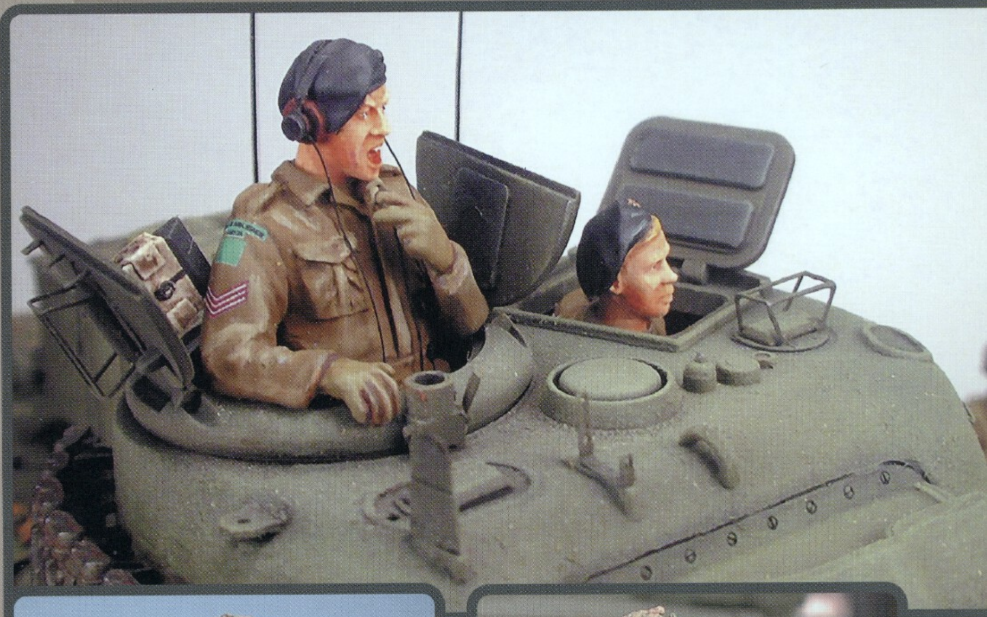
Weathering for me is make or break time in model building so I usually approach it with caution. I try and visualize what I want the model to look like before I do any weathering at all. So I usually start from the bottom up. I first apply a mix of pre mixed dry wall compound and MMP Weathering Powders Dark Earth (mud) and Verlinden Static grass. I mix it well and apply it to the entire lower hull. I then washed the mud areas quite heavily with raw umber oils again and let it dry for a few hours. It's at this point in the weathering that I add the tracks. Coming back the next day I spray Tamiya Buff XF-57 thinned at about 50-50 with Tamiya thinner and sprayed at low air pressure. Take great care when using this technique as a little goes a very long way. Letting this dry for a few hours I come back with a pin wash of raw umber oils and white spirits placed selectively over the mud areas that just got sprayed with the buff overspray. What this does essentially is give an impression of some of the mud being dry while others are still wet with a layer of dust and grime over everything. Its not a complicated process or an exact science but it works for me and I feel it gives a dirty dusty feeling to the model. Now some graphite powder for the worn metal of the steel chevrons on the tracks and the teeth on the drive sprocket simply rubbed on with a finger. Then seal it all in with a light coat of Dullcote just to be safe.

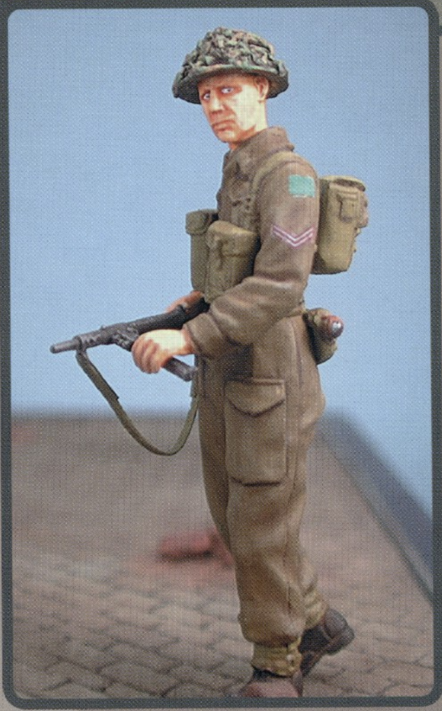
Figures

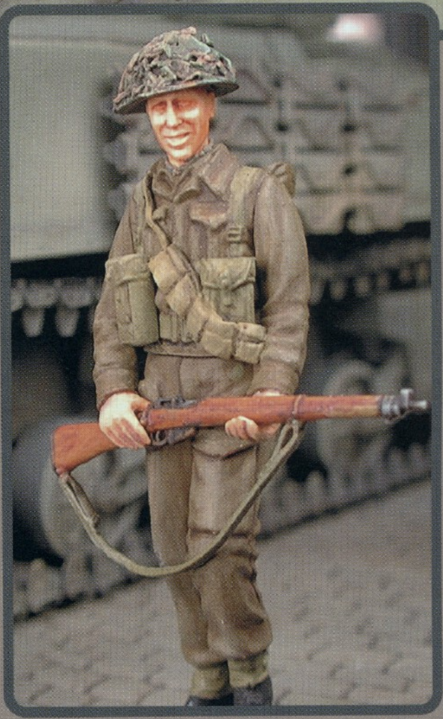
I feel any model wether it is in a diorama or just displayed on a plain base needs a crew for scale effect and to add a bit of life and colour. Allied modelers have had a lot of reasons to gripe about the lack of figures. Luckily these day's we have companies like Ultracast to come to our rescue. For my crew I chose the really great Ultracast British/Canadian Tank crew in Normandy with the addition of Hornet heads in Tanker berets. The Ultracast set gives you 3 figures, one full and two identical half figures. I decided to mix them up a bit and by cutting off the molded on arms and adding some plastic replacement limbs from the scrap box I was able to create a totally different look. The driver was spared the knife and a new head from Hornet was added as well. The



loader figure was the full figure in the set even though you see less of him than the others. I just wanted him to have his head visible (by Hornet of course) as if he had just popped out for a peek. The Two Infantrymen were taken from the Tamiya British Infantry on Patrol set. This set is great value for your money. The figure's are well detailed and the equipment is really well done. I replaced the heads with some resin Hornet items and added Dml helmets. I added hessian to the helmets made from rolled out epoxy putty and cut into thin strips. Putty was also used to make a bandolier for the riflemen as well as both weapon slings. I took a different approach to painting the Uniforms and equipment on these figs. I decided to jump on the Vallejo bandwagon and try my hand at using acrylics. I used a great article by Mario Fuentes found in 2 parts in issues No.19 and 20 of Historical Miniatures magazine. I started off by priming the figures with standard grey auto primer. The base coat was several light coats of Vallejo "English Uniform" No.921. The highlights were built up with a mixture of the base colour and Vallejo "beige camouflage" No.821. The shadows added after the highlights was a mix of the base and Vallejo "chocolate brown" No.871. I then added a toning "filter" to blend it all together. After drying completely I used Quartermaster's Depot "Canadian Insignia WWII No.35033" decals to add rank, Unit and Divisional insignia on the figures. Overall I am very happy with the results of







my first attempt at acrylic figure painting and with practice it can only get better, I hope. The flesh areas were done in the well known "Bannerman Way" with Windsor and Newton oil paints.

Base

To properly display a model I feel it needs a base with some groundwork as it places the model in its working environment. I first stated with a piece of Cherry cut to size then with the router I finished the edge with a simple ogee bit. I then stained it a dark red mahogany and sealed it with 3 coats of acrylic satin varnish. Dental plaster was poured onto the base and levelled out. Once dry I proceeded to draw a pattern with a pencil and then I carved out the cobble stones with an awl and a ruler. The entire base was sprayed Tamiya Flat Black and left to dry. The Cobblestones were painted a dark grey with some stones painted lighter or darker shades quite randomly to give some variance in their appearance. Then random oil washes were brushed over them to impart a grimy aged look. Followed by some MMP weathering powders "dust" and "dark earth" dissolved in Tamiya thinner. It was randomly run into the gaps for an even more realistically aged appearance. The Rubble areas were made by pouring casting plaster into an old picture frame and letting it set for about 5-10 minutes. Once it was firm enough I took a ruler and an X-acto knife and scored in the bricks. After it had dried for a few hours I broke it up and then repeated until I had enough brick rubble. It was painted in various shades of brick red and Raw Sienna. Oil washes of varying consistencies were run into every nook and cranny. MMP Powders brick dust was again mixed with Tamiya thinner and randomly placed in and around the rubble for a dusty appearance. The sign post is a Tamiya Item with the street name created in Photoshop. It was then printed out onto white decal film and placed on a piece of sheet plastic and mounted on the pole. The engineers sign was also created in Photoshop and printed out onto white decal film as well. I then placed it onto a piece of plastic sheet painted it a suitable wood colour. Once everything was in place I sprayed 3 light coats of Testors dullcote to seal it all in and help to protect it.

References

Sherman Firefly
By: Mark Hayward
ISBN 0-9638777-2-8
Published by Barbarossa Books
Zhukov House, 14 Maldon Road,
Tiptree, Essex
CO5 0LL,UK

M4 (76mm) Sherman Medium Tank
1943–65
By: Steven J Zaloga
ISBN: 1841765422
Published by: Osprey Publishing
Elms Court, Chapel way, Botley, Oxford
OX2 9LP UK

The Sherman In Canadian Service.
By: Steve Guthrie
ISBN:1-894581-14-8
Published by: Service Publications
PO Box 33071,
Ottawa Ontario,
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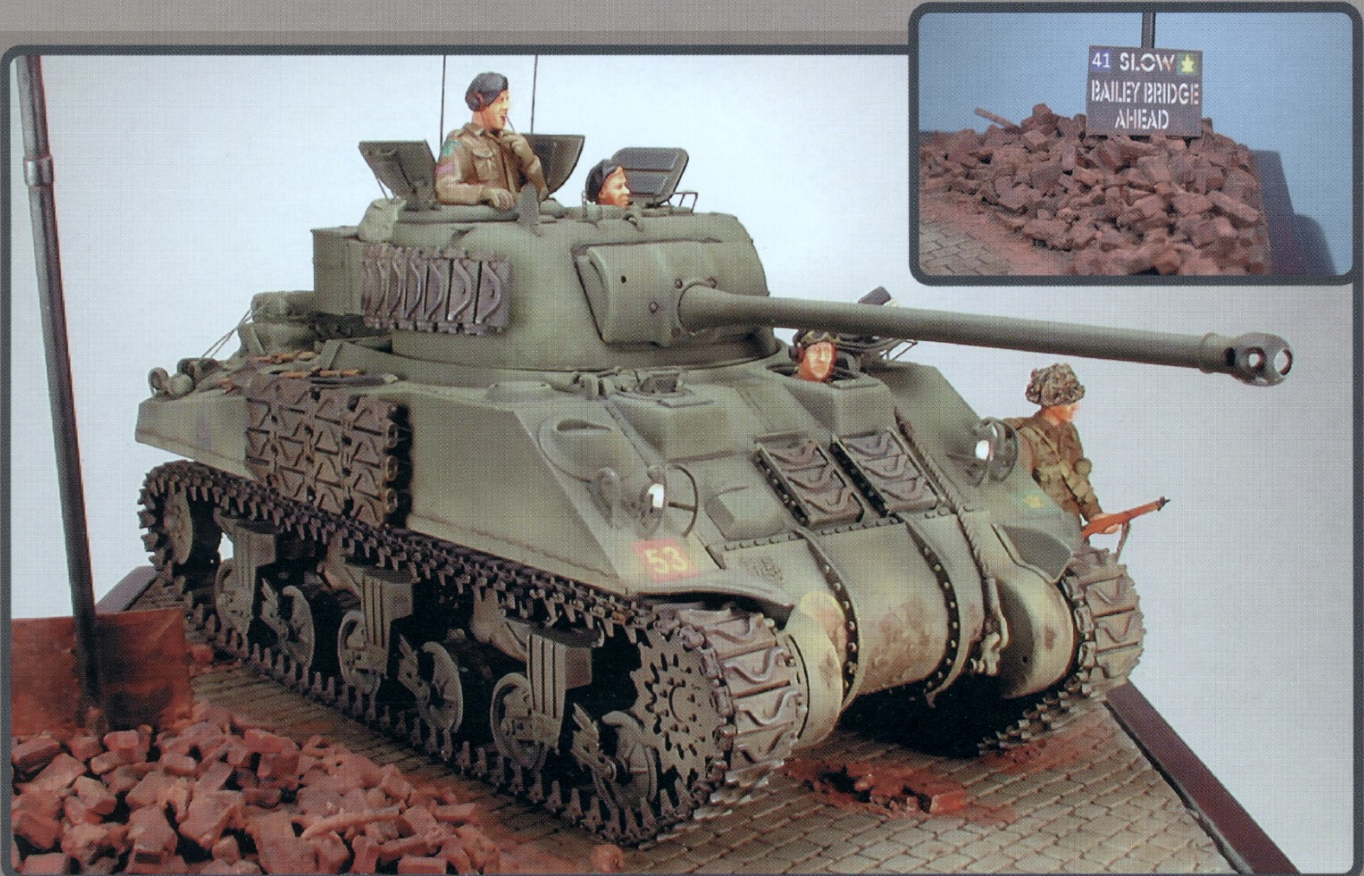
Issues #19 and 20 of Historical Miniatures
magazine
Articles by: Mario Fuentes



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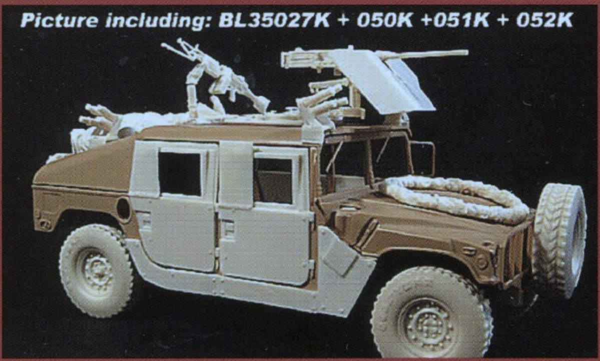
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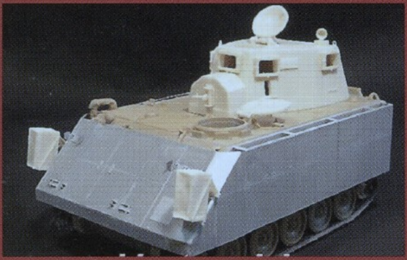

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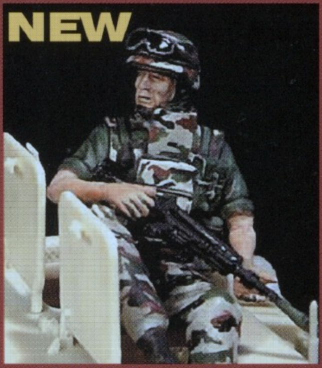

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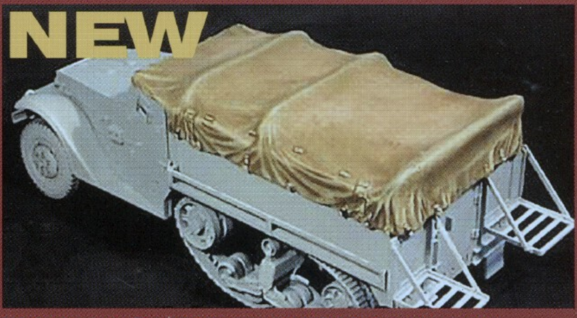
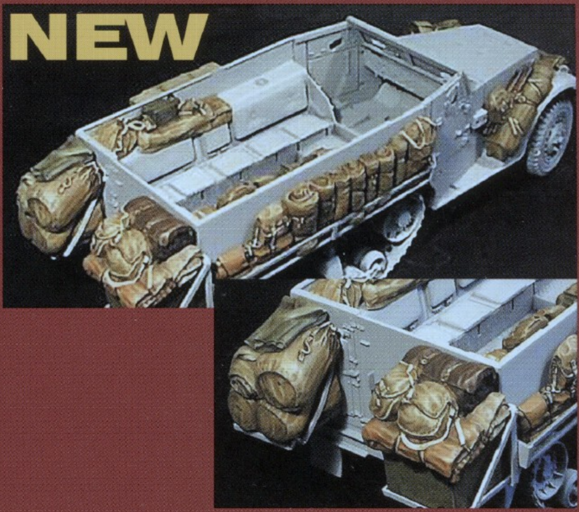


BL35059K Canvas cover for US M3 Half track for Tamiya M3A2 £13.00 + P&P



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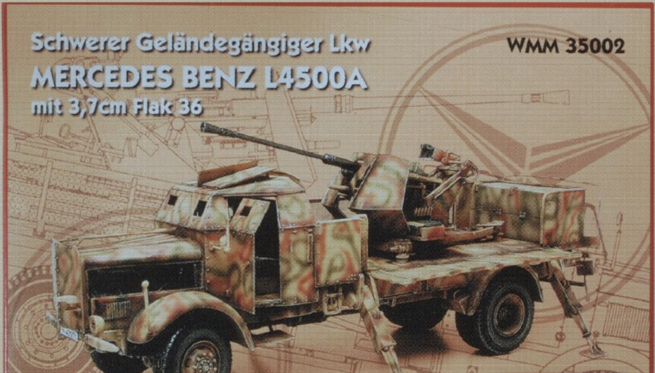
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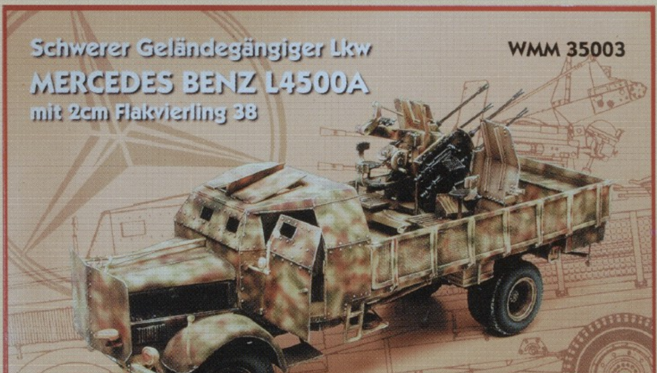
WMM 35002
WIENER MODELLBAU MANUFACTUR
Qualitäts Resin Komplettbausatz in 1:35 • High Quality Resin Kit 1:35
Mastered by Dietrich Wolf


Schwerer Geländegängiger Lkw
MERCEDES BENZ L4500A
mit 2cm Flakvierling 38
WMM 35003
WIENER MODELLBAU MANUFACTUR
Qualitäts Resin Komplettbausatz in 1:35
High Quality Resin Kit 1:35
Mastered by Dietrich Wolf

Full resin kits with Schatton turned brass barrels
Photoetched brass detail
Wire mesh drop sides
detailed engine compartment and cab

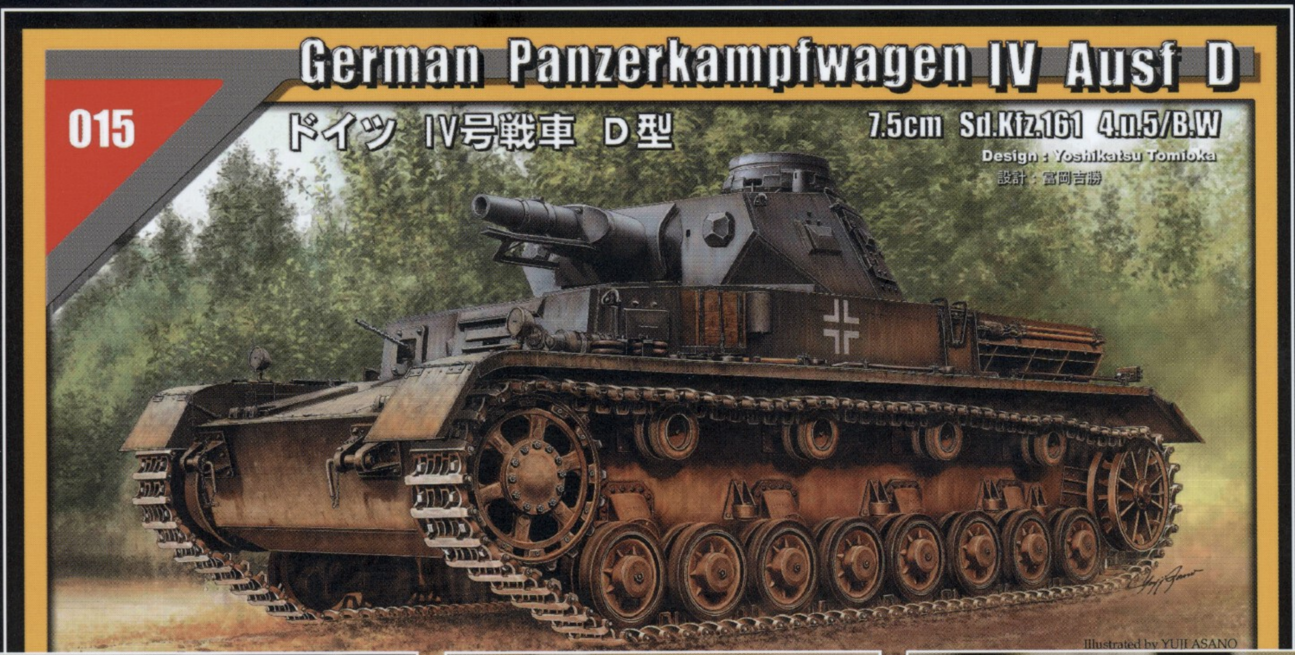
WMM 35002 Mercedes Benz L4500A with 3.7cm Flak 36 £120.00+P&P

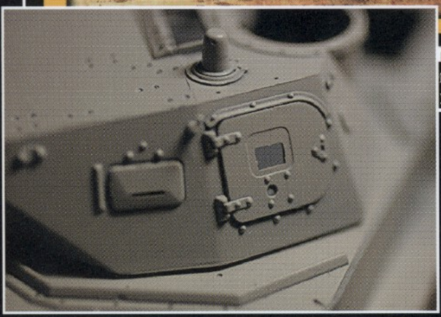
WMM 35003 Mercedes Benz L4500A with 2 cm Flakvierling £120.00+P&P

Tristar

Soon! Panzer IV Ausf D

Due for release February 2005


German Panzerkampfwagen IV Ausf D
015
ドイツ IV号戦車 D型
7.5cm Sd.Kfz.161 4.n.5/B.W
Design : Yoshikatsu Tomioka
設計：富岡吉勝
Illustrated by YUJI ASANO



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